

Factual Report – Attachment 1
Interview Summaries

OPERATIONAL FACTORS

ERA18MA099

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1.0 Interviewee: Richard Vance, Liberty Helicopters

Representative: Paul Lange, Paul A. Lange LLC
Date / Time: March 14, 2018, 0825-1024 EDT
Location: Liberty Helicopters offices
Present: Van McKenny, Emily Gibson, Jason Fedok - NTSB; Robert Hendrickson – FAA; Paul Tramontana – Liberty Helicopters; Manny Figlia- Airbus;

Mr. Vance started his helicopter pilot training in 2008 and was employed by Northeast Helicopters from July 2012 until February or March 2016. He began his employment with Liberty Helicopters in April 2016. He had 3,100 hours of flight time, all in helicopters. He had flown R22s, R44s, Schweizer 300s, AS350s and AS355s. He had approximately 1,100 hours in the AS350. He was also employed in a part-time status at Northeast Helicopters providing flight instruction in R22s and R44s.

Mr. Vance worked on a 4-days-on, 4-days-off schedule.¹ Thursday, March 8th was the start of his 4-days-on shift prior to the accident. He reported that he normally awoke at 0600 on weekdays and 0700 on the weekend. He lived in Danbury, CT and it took him approximately 1:15 minutes to drive to work in Kearney, NJ. His typical breakfast consisted of a “giant coffee and a couple of Slim Jims.” His daily shifts began at 0930-0945. The flights in the days prior to the accident were primarily FlyNYON flights. Normally the last flight of the day was the sunset flight. On Thursday night he went home and ate pork chops while he had soup for dinner on Friday and Saturday. He did not consume any alcohol during the 4-day-on shift prior to the accident. He went to bed around 2300 each of those nights. He did not experience any disruptions to his sleep. On Saturday and Sunday he woke up around 0700.

On Sunday he arrived at Liberty helicopters and had more coffee. He ate a fast food lunch (possibly Subway) between 1400-1500. His first flight of the day was at 1100, he could not recall how many flights he had between the 1100 and the 1845 accident flight. He went to the hangar, preflight the helicopter, and made sure it was fueled. He repositioned the helicopter from the dolly to a parking spot next to the fence and waited for the FlyNYON passengers. He stated that Liberty pilots were provided with their schedule the night before, but things can change. He flew the same helicopter all day which “makes things easier.” The pilots received a “heads up” when passengers were on the way, via text message. The text included an image of FlyNYON’s flight sheet which included a diagram of the passengers cabin, passenger names and weights, as well as the points of interest that passengers wanted to photograph. Flights were either 15 or 30 minutes. The more points of interest the passengers wanted, the less time he would spend hovering at each location.

He received the “heads up” text from FlyNYON operations about 1845. When the FlyNYON van arrived the passengers were sorted by which pilot they were flying with. Sometimes passengers would take a group photograph before the flight. He checked the passenger’s harnesses and put their life vests on. He pointed out where the cutter was and explained how to use it. As he does this he tried to get to know them, he tries to put people at ease that may be nervous. There were two separate groups on his flight – a 3 passenger group, and a 2 passenger

¹ His part-time work for Northeast Helicopters took place during his 4-days-off shift.

group. He briefed each one separately. He stated that the pilots were responsible for tethering the passengers in the helicopter. He began seating passengers from the right rear. He had the passenger sit on the seat facing outboard and placed the person who would be seated on the right side inboard seat on the floor in front of the right rear seat, also facing outboard. He then walked around the helicopter and attached their tethers. The right outboard passenger's harness was affixed to the left outboard hard point and right inboard passenger was tethered to the left inboard hard point. The pilot adjusted the tether length by moving a carbineer up and down links of the tether based on the individual's location. The left side passengers were then loaded in a similar manner. The tethers were all routed behind the passengers. The final person to be tethered was the front seat passenger whose tether was attached to the floor behind the controls. The loaders then got all the passengers in their seats and put their seatbelts on. During flight, the outboard passengers were to stay in their seats and restraints but turned sideways (outboard) to take photographs. The inboard passengers were allowed to remove their seatbelts and sit on the floor with their feet on the skids. Those positions determined how long their tethers were.

There was nothing unusual about the passengers on the accident flight. They were excited and very friendly. They were "proud" that they had paid attention to the safety information they received at FlyNYON. No one raised any concerns to him. Before he started the helicopter he provided a safety briefing that included who was going to remove their seatbelts and who would remain buckled. The passengers in the three corners of the helicopter (left front, left rear, and right rear) remained in their seatbelts. Otherwise, the seatbelt buckles would damage the helicopter's exterior during flight. He asked them to confirm what sights they wanted to see and they put their headsets on. He finished the safety briefing and explained how to use the seatbelts cutters. He told them where the fire extinguisher was and told them that if there was an emergency he would tell the passengers to get back up into their seats. He confirmed their points of interest and did a communications check through the headsets. He introduced himself again, he buckled up and fired up. The passengers could hear him and radio traffic but did not have microphones to speak to him or each other.

He started up the helicopter which was in parking spot #1. There were two helicopters to his left and he was the third to depart. It took him longer to talk to his passengers, that was why he was the last to go. He departed southbound out of Kearny Heliport on the "bridge route." The helicopters in front of him were both climbing and he stayed behind both. He climbed out at 50-60 knots. He told the aft, inboard passengers that they could get out of their seats or if it was too windy for them they could wait. They travelled south to the Statue of Liberty between 300-500 feet. He made sure both sides of the helicopter got shots of the face. They then flew at 500 feet to the Brooklyn Bridge. The maximum altitude with Newark was at or below 1,000 feet. He checked in at "the north tip of Governor's Island and Battery Park for the Brooklyn Bridge." He was in the East River Exclusion Zone. He was at 600-700 feet at the Brooklyn Bridge.

He headed up the East River to Central Park. He contacted LGA. They gave him an 02 squawk code and was told to stay south of the extended centerline of runway 31. He requested 2,000 feet and began a shallow climb while the left side passengers got photographs of midtown. The right side would get photographs of midtown on the helicopter's southbound return. He avoided the "Trump TFR" which was a one nautical mile radius around Trump Tower surface to 3,000 and left turn at the north tip of Roosevelt Island. He was traveling at 70-80 knots and did not slow to

“photo speed.” He slowed at the eastern boundary of Central Park. He stayed at 20-30 knots ground speed for photos. He was flying west and noticed the front passenger’s seatbelt was hanging from the seat. He picked it up, tapped the passenger, and told the passenger to put it back on, which he did. He said “it has happened before.” He recalled that passengers have inadvertently released their seatbelts because they have so many layers of clothing on. This was not eventful.

He completed his turn and the wind picked up. The front seat passenger slid back in the double bench seat toward the pilot, leaned back, and extended his feet to take a photograph of his feet outside the helicopter as they were flying towards the eastern side of Central Park. Now he was back to the east side of Central Park. The pilot was about to call LGA to head back down the river and slowed down because LGA ATC was talking to another aircraft. The helicopter was facing flying “westbound” (actually eastbound) with a 15 degrees nose up attitude and was passing through 25 knots when he put in a right pedal turn to 90 degrees towards midtown to begin to head southbound after talking to LGA. He said that was when everything started. If he could not establish communications with LGA ATC he was going to go into a hover. The nose then began to come right a bit faster than amount of pedal in, and he got a low rotor RPM alert in his headset. He saw engine pressure and fuel pressure warning lights. He believed he had experienced an engine failure. He lowered the collective to maintain rotor RPM and let the nose continue to come right. Central Park came into view and he briefly considered landing there but thought “there was too many people.” He continued the turn back to the East River and made his first Mayday call. He yelled to the passengers to get back in their seats. He had a slow airspeed and was not sure he could make it back to the river. He dropped the rotor RPM so he could “glide better.” He made a couple of other radio calls to LGA ATC. When he was pretty sure he could clear the buildings and make the river with the extra drag, he activated the floats (about 800 feet AGL). About 4 seconds before that, while he was in an established glide, he “came on the starter and got nothing.” He waited 1 or 2 seconds and tried the starter again but saw nothing. There was no temperature rise. He knew that people had gotten things caught on the fuel control lever before and checked it with his left hand but it was still in its detent so he knew that was not the problem.

At this point he was “committed to impact” and reached down for the emergency fuel lever. He “could tell something was wrong because it was in the up position where I should have been putting it.” He was at 600 feet AGL. He realized that was the cause of the engine failure, he “slammed it down” and tried the starter. He “got a T4 rise almost immediately.” He was passing through 300 ft AGL and “it wasn’t spooling up fast enough.” He was “too close not to commit to the autorotation.” He reached back for the fuel flow control lever and pulled up. Passing through 100 feet and 50 feet he began the cyclic flare in an extended glide configuration but he “did not get a lot of RPM back.” He “road it in” and did a flare reduction at 10-15 feet. He pulled the collective “as far as it would go.” He impacted the water at 5-10 degrees nose up and unknown ground speed. The last thing he heard was LGA ATC asking if he needed assistance.

It was “not a giant jolt.” As the front skids impacted the water “filled the chin bubble on my side.” He thought that it might have been just a splash, but it was not. Water quickly covered the floor. He kept his seatbelt on and reached down for the front seat passenger’s carabiner. He turned the knurled screw “two or three rotations.” By that time the helicopter was “listing past a

45 degree roll” and he “elected to get out.” By the time he unbuckled his seatbelt he was “fully under water” and used two hands to grab the door frame and pull himself out. He said that his harness was a four-point rotary buckle that was easy to get off. He tried to swim to the surface but he did not go up as fast as he thought he would. He reached for the pitot tube but his hands were slipping and he could not get a grip. He was dressed in layers for the flight.² The helicopter was “rolling on top” of him but he was able to get to the surface. He surfaced about 4 feet away from the nose of the helicopter and crawled up onto the belly. He stood up and waved for help but could not see anything so he just waited.

A tugboat was the first vessel to arrive and someone on board used a gaff to hook onto the skid to bring the helicopter closer so he did not have to get back into the water to get on board. They gave him some blankets and coffee. He later transferred to a FDNY maritime division boat that took him to shore. He was not sure how long he was on the boat but recalled climbing a ladder against a fence to get off. He was taken to a waiting ambulance.

He stated that his only injuries were a cut on his knuckle from when he slammed the emergency fuel shutoff lever down and a bruised hand from pulling so hard on the float trigger. He said his injuries were all superficial but he was very cold for a very long time. When asked about the emergency fuel shutoff lever he stated that “it was in the up position” and he saw the front passenger’s “tether loop was underneath the handle.” He stated that when the front passenger “scooted back prior to the pedal turn there was all that slack back there. So when he leaned forward again, it pulled the slack out and raised the handle.” He said it does not take much to pull hard for it to come up. The emergency fuel shutoff lever did not have a detent. He said even if you close it a little bit the engine will starve. The front passenger was a “tall person” and the seatbelts were “kept loose to provide freedom of movement. When he leaned back there was a lot of excess links.” Passengers were not belted that way on charter flights. It was “windy in there” and it blows the tether links around. A lot of passengers stated “I didn’t think it was going to be so windy” after flights.

He described what he was wearing for the flight. His clothing included boots, Hanes socks, winter socks, boxer shorts, cold weather compression pants, jeans, a long sleeve thermal shirt, a hoodie, and a nylon jacket with an inner and outer shell. He wore thin gloves (not ski gloves) that provided him with dexterity.

When asked to describe the safety briefing he provided to the passengers he stated that he checked the tightness of the harnesses and if the carabiners were fully locked. He checked all the camera gear to ensure that none of the cases were cracked and everything was attached. He patted them down to ensure there were no loose items. He pointed out the seatbelt cutter and told them where it was and how to use it. He pulled it out and told them it was to be used to cut the tethers, not the harness. He told them that long hair would blow around and looked for any winter hats or gloves that could blow off. He checked for shoes that were slip-ons and zip-tied any he found to ensure they would not come off. When asked if passengers were attentive and compliant during the safety briefing he said that they were. The flight sheet he received from FlyNYON contained passenger first names.

When asked if the passengers knew something was wrong when he told them to get back in their seats and he said that he did not know but that they could hear radio traffic and the Mayday call in their headsets. The passengers did not have microphones on their headsets as there would be too much wind noise through the microphones for effective communications. When asked if there had been previous events with tethers he stated that “it does happen, inadvertent or otherwise. I’ve brushed them away previously a couple times. Purses, cameras, whatever” He also stated that passengers can get close to the controls when they get on the floor.

When asked what kind of training pilots received when Liberty began doing these doors-off flights for FlyNYON he stated that the flights were “nothing special” but that they had created procedures for them. When asked if the SOP included briefings he said yes. When asked who placed the tethers in the helicopter he responded that NYONair personnel would put them on the helicopter before the helicopter was moved for the day. When asked why the tethers were crossed during passenger seating (with the outboard passenger being tethered to the hard point on the other side of the aircraft) he stated that he did not know. He added that the aft seatback cushions were removed prior to flight.

When asked if he had concerns about this flight or others he replied that he was concerned whether or not the tether could physically be cut by the knives carried by passengers. This had been discussed “verbally with people developing the SOP.” When asked what the response was, he stated that they were “trying to get a better option.” This concern was raised when the FlyNYON operations began. When asked if he had had any bad experiences with FlyNYON he stated that if the aircraft was not set up the way he wanted prior to flight he would fix it. He always double checked their work. FlyNYON CXs (customer experience employees) set up the tethers. He believed maintenance personnel would remove the aft seat cushions. When asked if he felt the passengers were adequately briefed for these flights he said he could not answer that question.

When asked how the floats operated during the accident flight he recalled feeling the drag they caused and that he could see yellow outside his door. There was no cockpit indicator (light) showing deployment. When the tugboat came to rescue him he noticed that the right front float was not fully inflated. It “was a bag.” He said he could not use it to step up to the tug boat. The middle bag on the right side was more inflated and he used it to step up on the tugboat.

When asked about his fuel load he stated that he did not recall exactly how much fuel was on board the helicopter. He generally “keeps it under 50%” and believed this flight had between 37-40%. He usually burned about 12% of fuel during a 30-minute flight. When asked if pilot perform a weight and balance, he said if needed they used iBal app. They have a 900 pound limit he knew the fuel and could usually do the calculation in his head.

The pilot stated that he enjoyed flying these flights because they had a purpose. The passengers knew the flight options – either 15 or 30 minutes. Passengers were not in a bad mood for these flights. When they began accepting these FlyNYON flights things got busier, which was nice. The winter “fizzled” a bit but the work was steady. When asked if he had visited the FlyNYON facility he said that he had been there once. He had never seen the safety video provided by FlyNYON. When asked if passengers ever showed up without a CX, he stated that there was

always one CX with them and that the pilots were in charge of tethering the passengers. The CXs usually did the seatbelts and headsets. The CXs brought the flight slip for the pilot and it was given back to the CX prior to the flight. The loader on the accident flight was a Liberty Helicopters employee named “T.” He placed the passengers in their seatbelts. He took off on the “bridge route” and lifted off for the 6:45 flight “around 7ish.”

When asked if the issue of tethers near the flight controls had been brought up to anyone he stated that it had but he “was not sure if it had been passed on.” When asked if he had ever been through a dunker training simulator he said that he had not but had talked to other pilots who had been through it. When asked if he had ever deployed the floats before, he said that he had done a “test blow” in the hangar but never landed on the water with them deployed. He stated that it required a “hard pull” to activate the floats. He knew what they should look like when they were fully inflated and firm. When asked whether he considered going back into the water in an attempt to rescue the passengers he stated that he really wanted to try but the weight of his clothing was one of the factors that impacted his decision not to. When asked about his concern with the hook knife’s ability to cut through the tether he responded that it was during the initial start-up of operations with FlyNYON and was pilots “talking amongst themselves.” He believed an SOP had been developed to address it. FlyNYON supplied the hook knife and harness.

He was asked if he had any additional information that he would like to provide to the investigation or questions about the investigation. He said that he had nothing else to add and was relieved the interview as over.

2.0 Interviewee: Ternon Brown, Liberty Helicopter Loader

Representative: Paul Lange

Date / Time: March 15, 2018 / 0852 EDT

Location: Liberty Helicopter offices

Present: David Lawrence, Van McKenny, Emily Gibson, Bill Bramble– NTSB; Victor Mevo – FAA; Paul Tramontana – Liberty; Manny Figlia- Airbus³

His name was Ternon Brown. His background included being a Liberty loader for downtown sightseeing tours, and then transferred to the New Jersey operation. He said at liberty, safety was first. His job was to help passengers get to the aircraft safely. He also helped the pilots tether the passengers, and double and triple check before the passenger entered the aircraft for safety. In August 2017, he started with Liberty, and transferred to the current location around November 2017. As a loader in downtown, his duties were similar as a loader here, taking care of the passengers and bags, but mostly he dealt with the passengers since they did tours.

When asked how he was trained, he said in the city they got a complete walk-through of heliport, advised of the rules, pass a test on safety and rules. He took a test that was written and multiple choice, provided by SAKER. He had a walk-through with Liberty, then was tested by SAKER.

After he transferred, he received additional training. He came to primarily assist in the FlyNYON flights for Liberty. He was trained by Moe, a manager at NYONair, on how to

³ NYONAir declined to participate in the NTSB interviews conducted on March 15, 2018.

operate the tether system. He received a walk-through on how to take care of the passengers, was showed a video on the harness system, watched other FlyNYON operations regarding the life vests, and how to double and triple check items. His training was primarily on the job training (OJT).

His supervision was by Moe a manager at NYONair. He was instructed on how to take the doors on and off, the tethers, life vests, and making sure there were no loose items that could fly around like seats, papers, etc. He had been instructed on how to remove the seat cushions. This familiarization training had been completed sometime in November. His work schedule was Wednesday to Sunday, 1100 to 1900. He said he might come in one hour early on Sunday when requested by management to help with harbor flights, and help people check-in by iPad. He did not do any activities at NYONair, only at Liberty.

When asked if he had ever conducted one of the FlyNYON rides, he said yes, it was fun, and a great experience where you could clear your mind. It was hard to explain, but he felt safe about the flight. When asked if he felt confined during the flight, he said yes, it did feel restricted.

He had the opportunity to interact with the pilot when working a FlyNYON flight.

He was the only Liberty loader working the FlyNYON flights. There was manual guidance that they used, as well as SOPs, and the guidance for loading was in their manuals. He did not recall ever seeing an FAA person observe their operation. He was trained by Moe, and overseen by the pilot of the flight, who he worked with. He also worked with a CX, who was a NYONair employee named Brett.

When asked during his flight experience if he was concerned about what to do in an emergency, he said no, because he knew what to do and felt secure. If he did not feel safe, he would not have gone.

The walk-through process prior to a FlyNYON flight was with customers – normally in a room. The pilot would get a text message that passengers were on their way in 10 minutes. He would open the gate, and the aircraft was already set up. After entering the gate, he introduced the passengers to pilot, and would have a brief conversation, with them. They would then walk to the aircraft in a group, take some photos, and then assist the CX in harnessing and seating the passengers in the aircraft, including the passenger next to the pilot. He would then get in the aircraft and tightly secure the passengers, lean them forward, and lock the carabiner. After that the pilot double checked. After that they get them into the seat and explain how the seatbelt is used. After the entire flight is loaded he made the passengers lean forward to triple check the harness and tethers. The pilot would then brief them prior to takeoff.

The NYONair CX would prepare the aircraft about 45 minutes to an hour before flight. To prepare the aircraft, the CX would completely gut it of cushions, and the puke bags taken out. They then put the tethers in and locked the carabiners. The head sets were put up, and the life vests moved to the side for passenger donning when they arrived. Occasionally he would assist the CX, however this was the staggers job in the morning. If the helo came in with the doors on, he would assist.

When asked if he put the passengers in the aircraft and secured the tethers, he said yes. Asked whether the pilot did so simultaneously he said, if he was not there the pilots did it. Everybody double and triple checked. Only he and the pilot were allowed to tether.

When asked if he ever had problems with the tethers tangling up, or problems with the carabiners, he said no. the tether was connected to the helicopter and the harness, and placed behind the seat belt lining so it would not interact with the tether.

He had no issues performing his job, and all the passengers were cooperative.

When asked about the seat belts, he said the front and outside passengers all had seat belts on and under their arms prior to takeoff. The pilot would instruct them on how to operate the seat belt. The two on the outside stayed in their seat belts, and the two inside passengers were called the adventure seats because they would unbuckle in flight, and sit on the floor with their feet out of the aircraft. The adventure seat passengers were instructed to put their seatbelts back together so they would not fly around and hurt anyone. The two outside passengers would turn sideways to stick their feet outside.

When asked if he communicated with the pilot, he said yes, they always ok'd each other on their work, and did that prior to leaving the aircraft. They made sure every carabiner was locked, and everything was correct for safety. That was done after the pilot was in the cockpit. They both double and triple checked. He said he does 3 checks, he puts the carabiner in the hooks and checked it, next he puts the passengers in the seat and the pilot checked, then he had everyone lean forward for a triple check. The CX also did that check.

Asked what the pilot did during his check he said the pilot did his checks, made sure there were no leaks and did his thing because they were not pilots. Pilots said everything was good, gives a thumbs up, which is an ok for him to leave. He then says to the passengers "have a safe trip, have fun, see you when you get back." He then stands to the side and watches the flight takeoff. He would then come inside to listen to the radio for the 2-minute inbound call for their arrival.

After arrival, he would wait for props to stop spinning, assist the passengers in releasing their seat belts, carabiners, with hanging up headsets, and assist in exiting safely. He would help remove the life vests, and he and the CX would then escort them to the gate or van to head back. It was rare the he was the one to escort them out, it typically was the CX.

He said he never had problems with the tethers tangling or getting caught. They were designed to avoid tangling. He made sure they were straight, and he would yank and pull them to make sure they were secured. The tethers were routed behind the seatbelts, so it would not interact with each other. They were secured into the locks and were secure between the aircraft and the harness worn by the passengers. If you pulled on the seat belt, with the tether between the aircraft and the harness, the seat belt did not get in the way. The carabiner was spun tight to secure and lock, need to use force to loosen up.

He would check all the equipment to ensure the aircraft was prepared before the people would arrive. He never had any problems with anything locking up or not working. Everything had

worked the way it was supposed to. He did not have any concerns about hooking the people up. He had been in meetings where he could express his opinion, and was told why they did things that way, and that safety was a big part of what they did. They did have safety meetings and were told to be safe out there. He would put the carabiner on the harness, and then test the tether to make sure the passenger were not able to get past the door.

Since he had been with Liberty, there had been about three safety meetings, take place on Sundays.

They would go over loading procedures, test out the tethers, test them on people to know how to do their job. The pilots and CX's were there. They would bring up examples of incidents, and would show what should be done, and show what rules they should follow. When asked if they had any incidents that he knew of, he said there had not been any incidents since he had been here, they were all hypothetical examples. They tried to prepare themselves so that they would be ready.

He was working the day of the accident. His normal day for him was 1100-1900, he came in at 1000 that day to assist flights. Prior to the accident flight that day, he probably worked about 16-17 flights, and the accident took place on the last flight of the day. They were using aircraft 0L, CK, and RU, but not sure. They all departed about 2-3 minutes apart.

The process involved NYON bringing the passengers together to the aircraft. They used 2 vans for the 3 flights. The CX brought the passengers over, and he assisted. He was responsible for whatever he touched. He loaded 0L with the assistance from the CX, and he assisted with aircraft CK. He did not assist with the third helicopter (RU). The accident flight was the first flight to load and the third flight to depart. The CX for that flight was Kiara.

All the passengers on the accident aircraft were outgoing, happy, in a great mood to fly.

The pilot physically checked the harness, and he double checked them with his eyes, but that was still the pilot responsibility. He connected the tether to the aircraft, checked and then the pilot double checked it and the loader triple checked it. He made sure things were not in the aircraft that could fly around loosely. He understood that the passengers were putting their lives in their hands, and he took it seriously.

I would tell them to buckle the seat belts after they get out. When asked why they put the shoulder straps under the arms of the passengers, he said because over the shoulder would cut into their neck, and they decided under the armpit was safer since it was tighter. He said the seat belt was not really needed because of the tether.

He worked with the pilot to brief the passengers, and each pilot provided a briefing. On the day of the accident, there were 3 groups of passengers, and there was a CX for each group of passengers.

He loaded the accident flight first, and then went too aircraft CK helped Marshall, and double checked those tethers, but did not assist the 3rd aircraft. Beau was the pilot of the third aircraft (RU).

It was a sunset flight with daylight savings time, so he noted they were a little later departure than normal. He could not recall if any of the passengers brought additional items in the aircraft. He made sure everything was secure. When he was not there a pilot would cover his duties.

When asked if they showed the passengers how to use the knife, he said no, he did not explain the harness and knife, that was part of the video briefing. The harness was already on the passengers when they showed up to the aircraft and he got there. He would also help with the headsets and attach them to the passengers, they have a zip-lock circle attached to a carabiner. He always puts the headsets around their necks so that they can hear everything they were spoken to. The headsets were mainly for the pilot to communicate with the passengers. The passengers did not have a microphone on the headsets.

He did not recall anything unusual about the flight, it was a typical, smooth day, and all the flights were on time. He was really blindsided by the accident.

The CX would attach the tethers to the aircraft when they first set up the aircraft prior to the passengers arriving. After the flights and the aircraft was repositioned to the fence, he would redo the seat belts and prepare the aircraft.

There were 2 types of tethers, and he thought the accident aircraft was using one of the newer tethers.

When asked what determined who got attached to what tether, he said the front tether was a long one holes except at the top, the ones in the back are complete with circles. It cannot hook on anything. It was placed under the arm rest so it would not be near any controls. Asked where he placed the excess length of the tether he said the last hole was taken and looped on the carabiner. The extra loops are sitting on top of the carabiner (the interviewee demonstrated by placing his hands on his upper back).

He would ask the back passengers to lean forward to ensure they could not go past the door frame. The connection point to the aircraft for the front passenger was on the floor.

They started using the new tether, and it was not as long as the older one and had 4-5 holes with a big knot behind it, which made it stiffer. Both types of tethers were used that day, and he was not sure if in the accident airplane there were 2 types. All the aircraft had the same type of tethers. They used 5 tethers for the 5 passengers on the flight. He did not require any extra tethers for the accident flight.

His title with Liberty was Loader.

The “adventure seats” were the ones where the passengers were sitting on the floor.

He had no prior aviation experience.

The passengers did not express any concerns. He talked to them, joked with them to have a great flight, and kept their mind at ease. Safety was first. He could not recall them saying anything specific, and everyone was happy and looking forward to flying.

The pilot worked with him all day, and he would come behind him to double and triple check everything. He told him he was doing a good job, and they proceeded with the flight.

When asked how the pilot looked, he said he looked like his regular self, on point, and alert. He would reiterate everything to him and was always on point.

He worked for Liberty, and reported to the chief pilot and Mike Mezzatonne. They had a director of safety, and it was Brent Duca. They see each other every day, double checks in with him, making sure he was doing his job. They were all one big team.

If he had a safety concern, he could personally go to Brent and tell him, or whoever he needed to speak to, but never had to do that.

When asked about the culture of the company with respect to safety, he said they put 150% forward. They made sure things were safe, because without safety there was no job. He allayed their worries so they could enjoy themselves. Even operating on the ground, they were careful about where they walked the passengers, they made sure there were no helicopters actively moving and no blades turning, safety was a top priority.

On the day of the accident, he woke up at 0900, got to work at 1000, went to sleep the night before early, and could not remember what time he got home. He got more than 8 hours sleep. He felt well rested, ate lunch, and was not tired.

There had been no changes in the way company operated or the amount of business.

He also loaded non-NYONair flights at Liberty. The adventure seated passenger started the flights in their regular seat, then moved to the floor (inside two passengers) during the flight. They were told how to hook and un-hook their seatbelts.

He said they had written procedures in a manual, covering 2 pages, with detailed information. He had a copy of the manual at his home. The latest one was updated from the last meeting.

The knots in the tether all looked the same, so he did not know if they were tied that way or manufactured. Cameras were secured by a carabiner to the harness. Their guidance manual I believed was called the loading manual.

CX meant they were a "Customer experience" and were all employees of NYONair. He did not know who decided which passengers got the adventure seats. CX's were allowed to do the seatbelts and headsets. The headsets did not have microphones. The only one speaking on the headsets was the pilot, and he would point out sights during the flight.

The outside back passengers did not unbuckle their seat belts.

The first time the passengers physically see the hook up system was when they (passengers) come to the airplane. The pilot and he would brief the passengers, but it was a shorter brief that the FlyNYON video briefing they already saw. The egress from the harness was explained by the pilot. The harness did not have a turn-buckle in front.

The doors off with the cushions off was a trained procedure. Each of the passengers had shoulder straps for their belts. The adventure seated passengers were instructed when to move to the floor and when to move back to their seats. The pilot and he were the only ones who would attach the tethers. In flight they were instructed when to move onto the floor, then back to the seat.

He had a Monday to Thursday work schedule.

He was taught by Moe, a manager at NYONair. He thought Moe was a customer service manager with NYONair.

At Liberty, his training was primarily hands-on. When asked if he ever had an opportunity to cut a tether with the supplied knife, he said yes, probably during his first week as a demonstration. It took about 1-3 times, maybe about 4-5 cuts before it cut through.

He said there should be no slack in the tether line, and you would remove any slack. A passenger should only need to turn around to see the tether to cut it if needed. For him, it took about 3 cuts to cut through, which took a couple of seconds. That would have been one of the old tethers, the ones they had the most of. It was the same knife that had been provided to the passengers and positioned on harness about at the heart level. Every passenger was provided one of those knives. Its secured in pouch with Velcro. He thought they zip-tied it in to make sure they were secure. It took about 3 seconds to take the knife out of the pouch. When asked about the difficulty in getting the knife out, he said it depends on the person and the strength you pull. He did not have any difficulties. The demo for all this was done at NYONair.

To his knowledge, no passenger had ever had to use a knife to cut a tether to get out.

When asked if he had anything else to add, he said no.

Interview concluded at 0930.

3.0 Interviewee: Pat Day, Liberty Helicopters Director of Operations

Representative: Paul Lange

Date / Time: March 15, 2018 / 1035 EDT

Location: Liberty Helicopter offices

Present: David Lawrence, Van McKenny, Emily Gibson, Bill Bramble– NTSB; Victor Mevo – FAA; Paul Tramontana – Liberty; Manny Figlia- Airbus

His name was Patrick Day. His title was the Director of Operations for Liberty. He started the certificate in 1986. He started working on certificate in September 1985. He was the one who started the company. In 1997, he took a sabbatical from personal reasons from the company and went to Hawaii to help a friend clean up their operations. After 3 years there, he came back to Liberty as DO in January 2001, and had been doing that ever since.

The CEO was Drew Schaefer.

He said he was a pilot, with an ATP helicopter rating, IFR. He had a CFI for a number of years but that had lapsed. He was type rated in the Falcon 50 and 900, G-450 and G-550. He had flown a number of helicopters. He started flying in H-52 in the US Coast Guard. He had flown S76, S61, and all the Bell and Eurocopter products except the 175, and the Agusta109. He had extensive experience, with over 20,000 hours flight tie, mostly in helicopters. He flew about 100 hours T-34 time before they went to the Charlie model, in the Navy.

He was current and qualified to fly at Liberty, but at age 65 took himself out of commercial flying, though he still had a medical certificate.

When asked how they began flying the photo flights, he said his son started this company called NYONair. They did not start doing the photo flights at first, just were selling content – video and photos of New York. It got more sophisticated as they got a larger following. The company tested a program of taking people up and taking pictures of the city, and it became popular. NYONair did not have the inhouse assets to handle the increase in business, and about 6 months ago they started to use Liberty equipment to fly their customers.

Liberty used to fly photo missions like boat races with doors off. They had not done that for a while, only occasionally did they fly with the doors off.

NYONair had 2 B-3's they were operating to use for that product, but one was returned to Canada on lease, and their sole B-3 could not handle the workload, so NYONair worked out an arrangement for pricing on the lease with Liberty.

He had their ops teams look over the flights that would be conducted. The FAA came in and took a look at what they were going to be doing to make sure they were comfortable with the flights to be conducted, and made some changes prior to beginning the flights. The FAA person who came was probably the PMI from the TEB FSDO, Tom Mancuzo, who he believed observed the loading and left with no comments. They offered to take the FAA up on a flight, but they left with no comment or objections.

The POI did not observe the operations. He did not interact with the POI often and that was typically the function of the chief pilot.

He said it was clear these were to be part 91 flights, and wanted to make sure they covered in the 91 regulations for buckling the passengers in and also using life jackets on passengers, which was not required, but one of the adjustments they made.

They flew a few early flights, but it started 6 months ago and became explosive and popular with the millennials. They started flying 10, 15, 20 flights a day. They had flown quite a few flights.

They had to make some adjustments, like dealing with the outside temperatures. Some flights had to be flown with doors on in cold weather. They sold 15-30 minute flights, and eliminated 30-minute flights when temperatures got to a certain level; below 30-35 degrees.

The FlyNYON product became very accepted in social media, and it was mind boggling how quick it took over. It really appealed to the millennials who were looking for experiences and not stuff. For example, NBC highlighted a zipline adventure across the Grand Canyon, which was an example of people wanting to go to the edge, but still stay safe.

When asked if they ever assessed the risk of the tethers, he said he knew his son had hired a safety consultant long before Liberty got involved with him on this adventure. They needed to make sure the equipment was not going to fall out of the helicopter, and needed to make sure they cover all their bases.

They were comfortable with the operation. As a former Coast Guard pilot, he was concerned about egress from the aircraft in an emergency, and they had discussions on the egress. They also considered the younger passengers who would be flying, and more likely to be able to egress compared to other passengers they typically flew around New York. The type of passengers was a consideration in the operation, and they likely would not consider allowing elderly to fly these type of flights.

The New York tour business had been 75% of their flight activity over last 20 years, but recently their tour business had been cut 50% due to the political element in New York. Also, with the evolution of the charter business like the blade.com, they had scooped up the retail part of the charter business and Liberty had basically become an asset provider to the .com part of the business. The charter business had changed dramatically over the past 3 years. He could not give a percentage, but it had been changing.

The NYONair organizational chart included him. When NYONair was developing the Las Vegas operation, they needed a part 135 certificate, so they purchased a single-pilot single-ship certificate in Cincinnati. They needed to convert it to a full operating certificate, so they needed to occupy all the positions and develop the certificate through the Cincinnati FSDO. They placed his name on the operating certificate as the DO. The idea was that as soon as NYONair developed the personnel that would qualify, he would remove himself from that position and put them in. The certificate was for the full 48 contiguous US, but they did not get the certificate converted until October 2017. The name on the certificate was East West, which was the company he bought to get the operating certificate. They were East West, dba NYONair.

When asked about Foxtrot, he said that was something his son was trying to develop like blade.com. Charter customers they used to fly to Hamptons had now gone to websites to purchase buy seats on a charter rather than purchasing the entire aircraft. Blade did not have an operating certificate, so they had to hire companies like NYONair to provide the assets. There was an effort by operators to develop the same type of profile. They had not done that at Liberty.

They eventually were able to expand the NYONair 135 certificate to multi-aircraft when they developed the manuals, personnel, and training. That all started in March 2017 and concluded it around October 2017. The certificate was a basic VFR day/night passenger/cargo helicopter operating certificate.

NYONair expanded the certificate he bought by developing manuals, personnel, and training, and staffing of the 119's, which all occurred in March 2017, and concluded in October 2017. It was a basic VFR day/night passenger and cargo certificate, which was a standard type of certificate.

Life jackets were added. To make sure that people who were using their phones, they had the appropriate cases tethered. FlyNYON did provide the casings for the phones; that was not something the passengers had to provide.

When asked if the life jackets were added as a result of a meeting with the FAA, he said no, the life jackets were just an additional safety feature for the passengers, and not required by the FAA. Liberty had been flying passengers with life vest since 1996. There was an opposing incentive because a couple of helicopters that had gone in the river, and occupants failed to egress because the jackets got tangled up. They went back and forth with tour operators over the issue, and decided to use them. Adding life jackets around the passenger waists provided an additional hazard. That went back and forth until tour operators decided to do it. TOPS had decided it, and Liberty had been a member in TOPS for years, but no longer were members. It was a corporate decision to continue to abide by the rules like high intensity strobes, high visibility blades, all now requirements under part 135 and still a part of their safety structure. When asked why they were no longer members of TOPS, in order to be a member, they had to attend all their meetings undergo audits. He said when Liberty lost 50% of its business, they had to cut costs and left the program.

He did not own Liberty. Liberty was owned by Sight-Seeing tours of America, and that was where the shares were sold. The CEO was Drew Schaefer, and the COO was Chris Vellios. The president position at Liberty was open. He said he reported directly to Chris.

He said he knew the accident pilot, but had not flown with him. He said Paul was the check airman, and Brent was the training captain, along with Mike. He said he had complete confidence in the them to ensure the pilots were highly qualified, trained and safe.

When asked when he last interacted with the pilots, he said he had interacted more recently than in other years. He was making decisions about the winter temperatures, interacting with all the pilots and was concerned about how long the pilots were flying in those temperatures. He made sure there were no pressures for pilots to fly, and no concerns from the pilots about pressure. He had received some comments about the temperatures. They had some cold weather and increased business, so he got involved.

He said his general philosophy was that if a pilot was uncomfortable they would be distracted, and if not comfortable with a mission, do not fly, whatever the mission would be.

Liberty pilots were salaried. In the tour industry, pilots were typically paid by the flight, but not at Liberty.

When asked if Liberty had a formal safety program, he said no, they did not have an SMS system, but they did abide by all the parameters for the TOPS programs and had a separate tour safety program, and had continuous safety training. They made sure everyone was in synch with how they operated their helicopters.

When asked if they had a written safety policy, he said yes, and it was in their GOM.

When asked if there was a risk assessment done for these doors-off flights, he said no, there was no formal risk assessment but more an informal process of reviewing the operation involving informal meetings and conversations.

When asked how Liberty determined what safety concerns existed in the company, he said their safety officer recently took another job, and he had just appointed a new safety officer. The old was Tony Pasco, who left about 3 months ago, and the new safety officer was Scott Fabia.

When asked what the safety officer did, he said they were a small company and they interacted every day. He said they maintained constant communications, and were always with their cell phones. He said they actually over-communicate with each other to ensure they were operating safely. On any given day, they could have 6 pilots operating 6 helicopters. For the missions, they had the ability to monitor them with Sheets and Spider-tracks, which was not required. They always knew who was flying and when, and monitored pilots experience flying to remote sites or suspect weather conditions, and replaced them if necessary. There were a lot of variables and they were constantly attending to them.

When asked if Liberty used a flight risk assessment tool, he said no, and it was a bureaucratic morass. Assessments were made by him and his chief pilot. That meant something to leadership in a safety program and added that his pilots know they had leadership, and could come to them with any concern they had. They would never dismiss it, and would discuss it in an intelligent way, and make adjustments to what they were doing.

When asked specifically how concerns of crew members were raised to the company, he said the primary means for expressing concerns was face-to-face, and there was no need for a chip in a box, they could call him. They had open and constant conversations with their pilots. He said he did not mean to dismiss SMS, which was good for larger companies, but for a small company like theirs with the open ability to talk to their leadership, they could just call him up and discuss.

When asked about reports from crew members about safety concerns, he said there had been concerns about small items, and they were addressed. He could not remember any of those concerns, but they all got addressed right away. The temperature issue was a latest issue, and that was addressed within the last two months when pilots developed a temperature threshold to operate under.

When asked if there were specifically any reports of safety concerns related to passenger loading and restraints before the accident, he said there were some concerns. When asked to describe those, he said there was a concern whether the passengers would be able to egress in an emergency. The general discussion was based on whether they would be constrained and not fall out, and whether the way to egress was sufficient to get out.

When asked how they evaluated or decided that the egress method was adequate, he said that they discussed some changes in the harnessing, but was not sure if those ever were put in place. He knew that they had ordered different harnesses for the passengers and a different knife or tool to cut the harness or tether. That discussion had occurred over the last 6 months. He could not recall the last meeting that was discussed at.

They held routine safety meetings once a quarter. He said since the accident, they were reviewing existing procedures and equipment, and had decided not to operate FlyNYON flights until the NTSB concluded its investigation, and when Liberty could come up with a different way to make sure passengers could egress in an emergency.

When asked how he was informed of the accident, he said through their operations and got a call that the helicopter had issued a mayday call through Spidertracks via a button the pilot could push. Tyler Fitzgerald, a part time Sunday employee, contacted him. He then went into their emergency response plan. He knew by the time he got the message that the NYPD and FDNY were there and on-scene since they always had an excellent response.

He said this was their 3rd helicopter to land in the river. A previous landing involved a EC130 blade defect requiring a landing in the river, which was about 2007. He said she popped the floats and everyone got out safely. That happened across the river from West 30th street. They had had no other fatal accidents other than the Hudson accident and this one.

When asked when they started using floats, he said it began on the 350D model. They had always operated with floats. When they trained people to autorotate to the city, waterways were considered their emergency landing areas. Getting the aircraft back into the wind and having a landing area was very important for the pilot. Water was a much more forgiving landing area when in an auto-rotation. He said, “had the floats fully inflated in this case, we wouldn’t be sitting here.” He said he had flown 5 years in the Gulf of Mexico, and had spent 2 years training people to land on the water since it was more forgiving.

When asked if the FAA ever attended their quarterly meetings, he said no. They would attend some training episodes and initial training in January or February. Liberty had had their 135 certificate for many years, and the FAA had observed their training.

When asked if Liberty flew photo missions for other companies, he said they used to fly photo missions for a lot people, like for boat missions, but had not done those for a while. Occasionally they would have somebody who wanted to go up and do a photo shoot, but he could not remember the last time a request had come in.

NYONair had one aircraft in Las Vegas and one in Los Angeles on the East West certificate. When asked why the certificate was held in Cincinnati, he said that was where the company he bought was located. When asked if anyone other than the PMI had come to observe their operations, he said no, not from the operations side.

When asked if he interacted with the POI often, he said not much, and the chief pilot mostly talked to the FAA.

When asked about concerns with the tether system, he said part of it was due to the passenger age. If the passengers needed to egress, they expected them to egress. But anytime a helicopter went upside down with passengers hanging in the straps, egress would be problematic. They had two H3s go into the water inverted when he was in the Coast Guard, and trained crewmembers did not get out. He said it was not a pleasant experience, and with cold water temperature, the body and mind would go into shock.

He said the chief pilot, director of operations and director of maintenance on the 135 certificate were required 119 positions. When asked if a position other than his had been filled, he said not yet, but was about to. When asked if he was holding two 119 positions, one at NYONair and one at Liberty, he said correct. When asked if there were any challenges to holding the position of Director of Operations at two separate part 135 operators, he said no. When asked to clarify his answer, he said he had been doing this a long time, and safety was a priority at both companies.

When asked if his son had a position at Liberty, he said yes, and that he had just transitioned from the charter marketing department to a lesser role in the company. When asked what that role was, he said consultant. When asked why he was moved to a lesser role, he said because he was busy over there, and that NYONair was a flourishing business that took all his time.

FlyNyon was a customer that contracted with Liberty to fly their customers. He said that so long as Liberty could fly within the confines of the regulations, and the missions were safe, they would fly them.

When asked if Liberty was dealing with FlyNyon and not the parent company, he said correct. The NYONair 135 came about because in the Grand Canyon; the flights were much more than 25 miles away from the departure point.

When asked if Liberty had an LOA to conduct the part 91 flights under an exemption, he said yes.

When asked if, since Liberty had a 135 certificate, did Liberty participate in any 3rd party audits, like ISBAO, he said no. They used to do TOPs audits, and they only once missed an audit, which was last year.

When asked to clarify if there was ever a risk assessment conducted prior to conducting door-open flights and for use of the tethers, he said not a formalized one. He added that he did not know what assessments FlyNYON conducted.

He was still the Director of Operations at NYONair, and that was why he was aware of the assets they owned in various locations. When asked if FlyNYON contracted with other companies similar to Liberty, he said he did not know.

When asked if they were allowed to operate on Sundays, he said they had 20 years of political bliss, and then DeBlasio became upset with the helicopter noise and wanted to shut the tour business down completely. They settled on a 50% reduction of non-tour flights in 2015. There had been a gradual decrease in 2016, and in 2017 there was a full reduction. That was a political settlement in New York City.

The Liberty had 2 aircraft that had imaging data through an Appareo vision 1000 system. He was not sure if the Liberty safety officer reviewed that data.

He said pilot training on emergency procedures was conducted in-house, and included auto-rotations to touchdown. He added that he considered the auto-rotation on the accident flight as an excellent auto-rotation.

New Liberty pilots received classroom egress training, but not practical training. They were taught how to handle themselves and the passengers if there was a touchdown on the water and hopefully you were floating. The pilot would then brief to unbuckle the seatbelts and not to inflate their life vest until out of the aircraft.

When asked about the Liberty pilot reaction when they started flying the FlyNYON flights, he said as a pilot he always enjoyed doing doors-off missions. It was a greater flight experience as long as it was safe, and he had done many of those flight. The Liberty pilots did not object to flying the FlyNYON flights, and he assumed they enjoyed the experience of flying a different type of mission as long as it was legal and safe. He never received any objections from the pilots.

When asked if there was any specific training on what a pilot had to do before flying a FlyNYON flight, he said yes, and it was discussed in ground school for new hire training. Before they flew those missions, they would get a thorough check out on those missions, and put them up on two flights as a passenger so they can see how they were conducted. And with the tour business in the city as well, a great deal of effort was put into making sure they were rock solid PICs before they would turn them loose flying around their customers.

When asked if there was any guidance given on what to do if they had to do an auto-rotation while passengers were unbuckled doing photos, he said he expected the pilot to give as much of a brief as he could. If flying at cruise speed at 1,000 feet, an engine failure would mean that the flight would be touching down in 1 minute. From their training, Liberty pilots understood how much time they had. In this event, the pilot was at 2,000 feet and flying at 75 knots, so he had to make some decisions. He said they tell pilots to give passengers as much of a brief as you can before touching down. He had done two water landings himself, and in one case was unable to say anything because it began at 500 feet. In the other case, he was able to tell them to prepare for emergency landing.

He said if he was flying with a pilot and observed anything in an instructional way, he would tell them. For example, the other day they had a strong wind coming back from NYPD and when they landed, he debriefed the other pilot on the winds and terrain and how to make the approach. The short flights in NYC required more decision making than 10-hour flights out west.

He said a safety program was a dynamic living force in this company and never stopped. When asked where that information would be found in the manuals, he said it was in all their manuals. He said if it was in there, you could write it down, but pilot technique and judgments - these pilots had to make major decisions on fuel load, 6 people on helicopter, cannot take full fuel, so they had to understand the mission. Going to east Hampton, if it went IFR, they would have to get a special to get into east Hampton. The pilot had to decide how long to remain outside class D before diverting to west Hampton. The new pilots he had now had not experienced a lot of the unique aspects of flying in NYC.

When asked if, prior to the Fly NYON flights, if they used the tether or harness with the photographers, he said yes, and it was very similar to the what they currently were doing for FlyNYON. They used to do boat races where the photographer would harness to a center attachment point so he could go to either side. It was a pretty demanding and fun mission where there were a lot of helicopters in the sky. The last time they did a boat race was 15 years ago.

When asked where the 50% business reduction had come from, he said in 2015 for the numbers at the downtown heliport, they did about 100 flights that January. Now they could only do 50 flights in January 2018, and Sunday flights were also eliminated. That applied to their tour flights out of the downtown heliport, but not at Kearny, which is why the accident flight was allowed to fly. They can fly the photos flights anywhere. The air tours were conducted under part 135, and the photo flights were conducted under 91.

When asked if he had ever flown on a FlyNYON flight, he said no.

When asked about his thoughts on the harness system, he said right now there needed to be adjustments because 5 people did not get out of this accident. When asked if he was concerned prior to the accident, he said he was always concerned regardless of the mission. He was a Coast Guard pilot and had pulled people out of the water many times. When you see 5 vibrant people not escape, they know they had to make changes.

When asked if FlyNYON put an age restriction on their flights, he said he did not know.

When asked if Liberty had experienced a recent increase or reduction in aircraft or pilot work force in last couple years, he said based on the number of aircraft they had flying that year, they had been up to as many as 13, but were currently at 7. When they toured in the city they would have 2 aircraft flying in the city with 3 pilots in relief. If they requested 3 aircraft, they would staff 4, and if 4 aircraft, they would have 6 pilots.

He said the length of duty day was lot shorter now for the pilots. It used to be that they would start around 0900 and work until 2100, but currently the pilots were typically done by 1600.

Staffing now was 5 facing 5 pilots groups of pilots, who worked 4 days on and 4 days off, and 2 pilots working 7 days on and 7 days off. There were 6 pilots on each hitch.

Typically, they had some pilot attrition during the year. Business typically picked up around Easter and did not end until about 2 days after New Year's Day. January and February, and most of March were pretty slow months.

When asked what percentage of flights were tour vs. photo missions this time of year, he said they were averaging 20 tour flight per day, and 5-12 FlyNYON flights. That Sunday was a very busy FlyNYON day. They were not flying any tours that day.

They had kept the 4 on 4 off pilot schedule even though the pilots did not work until 2100 like they did 15 years ago. When the pilots were done, they were released. They did not wear out people with a 14 hour day. They had some night flights, so pilots sometimes had to start a little later so they did not run out of their duty day.

When asked what was the difference between the photo flight and a tour flight, he said a photo flight was set up specifically as a photo flight, and you would have to talk to the Washington, DC people to figure out the difference. There had been a great deal of discussion about it in the Hawaiian market. He said that in New York, you can call it whatever you want either way, but clearly the purpose of the accident flight was a photo mission. Tour business was an aerial tour regulated by part 136. They called it a 135 mission even though that particular flight was exempt because of the 25 mile takeoff and landing location exemption. When they first came out, if you wanted to have tour program under part 91, they had to have separate drug program, so they would circle 135/136 for tour on the paperwork. They had since eliminated the redundant drug program requirement for part 91.

When asked who had operational control of accident flight, he said Liberty helicopters. When asked if the flight was conducted under a Liberty LOA for part 91 ops, he said he did not know if they had to do that for the photo flights, and thought that was only for the aerial tour flights. He added that regardless, they had an LOA.

He said it was a very difficult time for Liberty helicopters. They had a pretty clean program over the last 10 years and he was looking forward to whatever the NTSB came up with.

Interview concluded at 1215.

4.0 Interviewee: Scott Fabia, Pilot and Safety Officer, Liberty Helicopters

Representative: Paul Lange, Law Offices of Paul Lange, LLC

Date / Time: March 15, 2018 / 1330 EDT

Location: Liberty Helicopters aircraft hangar

Present: David Lawrence, Van McKenny, Emily Gibson, Bill Bramble– NTSB; Victor Mevo – FAA; Paul Tramontana – Liberty; Manny Figlia- Airbus

During the interview, Mr. Fabia stated the following:

Asked to describe his background, he said he had been a flight instructor at Platinum Helicopters in Princeton, New Jersey, for about 1,000 flight hours from Sept 2016 - April 2017. Prior to that he was an instructor at Sky River helicopters for 1.5 months. Before that he did his training at Northeast helicopters in Ellington, CT. He had been flying since 2012. His certificates included an instrument, commercial, CFI, and CFII, all in helicopters. His total flight hours were about 1,900 hours.

He had been serving as Liberty's safety officer for about 1.5 months. However, he was hired by Liberty as a line pilot in April 2017. John Simone had held the Liberty safety officer position before him. Mr. Simone had found another job with a different company in mid to early February. Asked to describe his responsibilities as safety officer, he said "nothing formally." Asked to confirm whether he had no job description, he said he had received a briefing packet from his predecessor who told him he should make sure the life vests in the helicopters were up to date.

There were a lot of requirements they had to comply with for the Tour Operators Program of Safety (TOPS) program but once Liberty was no longer a part of that there was a lot less to do. His role was to be a second set of eyes on procedures and things to see if they could make improvements. Asked how he saw his position he said he was given the position because he had a mind to look at what was going on and try and improve upon things, to see what could be changed.

His schedule was officially 4 days on 4 days off, but he tried to work as much overtime as he could. Asked whether management asked him to work overtime or he did, he said he asked. Asked how many of the days he worked he flew, he said 100% unless there was some sort of weather issue. Asked how many flights he did in a day he said it depended on the day. In the past month he had flown about 40-50 hours. It was different every day. Asked what type of flights he did, he said "everything" – charters, Nyon flights, and tours.

Asked how the company determined which pilots and which helicopters were used for the NYON tours, he said "That's all done above me." Operations put it on the board assigning him to helicopters for specific time slots.

Asked how he felt about the NYON flights, with doors off, the way the passengers were seated, he responded in what regard? Asked if he was uncomfortable about those tours or preferred them, or if anything concerned him, he said he personally preferred those flights. He enjoyed interacting with customers. He enjoyed the mission it offered him. Flying over the city was awesome. He was able to work with professional photographers and see the shots he helped them line up. With that mission came unique challenges and risks that he had concerns about, but it was like anything. There was always something he could be nervous would happen. It could be anything.

Asked whether anything in particular about the NYON flights made him nervous, he said he was always really afraid somebody was going to fall out or something was going to fall out like a phone and hit someone on the ground. Passengers did stupid stuff sometimes. They might want

to stand on the skids or something. The human aspect made it more challenging. The pilot was flying and allowing them to do something that was an incredible experience for them but also curtail their level of activity. They had to tell them to sit on the floor, not stand up, and little things like that.

Asked whether he had ever had any close calls related to those types of things, he said he had had passengers take their seatbelt off after he had told them not to. He had had passengers take their phone out of its case and try to take a selfie out the window. He had had passengers' headsets come off. That was always a concern because then they could not hear what he was saying. The Passaic was always notorious for lots of birds and he was always concerned one would come in through the side door. He had had no real close calls. One of the scariest though was a guy up front who was really nervous and grabbing at stuff and he told him not to grab stuff near the pilot and made him hold his hands in his lap like a child.

He was at Liberty before the company started flying NYON flights. Asked how long ago they began doing those, he said maybe back in June or July 2017. Asked what kind of training was provided to prepare for the flights, he said he had not started when the company first began operating them. He started doing the flights regularly in September or October 2017. Liberty pilots were given training by one of the NYON pilots, Christine Brown, who had been doing them much longer. She had put together their new hire training.

Asked what the training consisted of, he said he could not recall the original contents because he subsequently ended up making some changes to that safety briefing. Generally, it was an overview of the flights, altitudes, where they would be going, who they were speaking to on the radio, and how to brief the passengers. It included what to look for when accepting passengers and loading them. He thought his initial training for the NYON flights was with a Liberty pilot who had gone through the NYON briefing and told him the key points. He could not remember who it was. He was briefed before he started doing the flights.

Asked how he learned to do the tethering of passengers, he said that when he started, it was still very much a NYON product. They had their customer experience (CX) reps as the leads on that. They put the passengers in and the pilot was just watching and then checking. They verified that the carabiner was clipped in and locked and that the passengers' seatbelts were on. He taught himself how it should be done by doing the flights. He did what he was comfortable with because he was taking the risk. The NYON way was much more liberal than he was comfortable with. When Liberty first started, passengers were able to stand on the ground outside the helicopter while tethered to the helicopter. Liberty pilots brought everything in a lot tighter because of the risk of someone falling out.

Asked if other Liberty pilots had shared his concerns when they began doing the tours, he said that when Liberty really started doing the NYON flights, the pilots discussed that they had to have some sort of standardized SOP because depending on the CX they got, they received a different setup with the equipment in terms of which loop was used to secure the passengers, whether the seatbelt was placed over or under the arm, and whether they were letting the passenger hang out or not. The pilots were spending a lot of time fixing things - tightening lanyards and harnesses. Liberty pilots came up with an SOP and all the pilots and CX were

trained to follow the SOP. The big thing was that the pilot did all the tethering because if someone fell out, the pilot was responsible. It took a lot of the responsibility out of the CX's hands. The genesis of the SOP came about because enough pilots had had some sort of gripe in dealing with the CXs and he had spoken with a couple of the pilots and said, "I think this is what we should do." He added, "We were waiting on NYON and it became apparent no one was going to fix the problem for us," so they tried to put something in place. It was a group effort. Everyone knew at both companies that it was a smart thing to do.

Asked when the SOP was generated, he said the first iteration was developed around September or October, when he began operating NYON flights. Asked who worked on it at Nyon, he said "Really it was worked on here. We didn't care what they thought because they didn't work here." He and Brent Duca were the leads on that and after it was in place they ran it by Christine Brown, NYON's lead pilot. It was Liberty's SOP.

Asked how standardized the CXs were, he said he and Brent had put together the formal training – how the aircraft was set up, the proper fitting of harnesses, how they expected passengers to be tethered. It was laid out step-by-step, describing what every loading procedure should look like from start to finish. Criss-crossed lines, everybody was set up on the same page. Asked if he corrected the CXs if they were not doing things per the SOP, he said that if the CX was not doing what the SOP stated the pilots would ask them to leave and continue the loading procedure as described in the SOP. Asked if that happened very often, he said in the beginning there were issues because they were not dealing with pilots who understood the risk and the concern.

They were dealing with sensitive kids, so when corrections were made on the spot their feelings were hurt and it came back that the pilot was being mean to the CX. To avoid confrontation, the Liberty pilots would simply say, "we have it from here" if the CX was doing something wrong. As the NYON flights grew bigger, they had a second training and as time passed, the CXs realized they had to get it right or be put in the corner. Asked whether it was correct to say that the Liberty pilots had gotten together and forced a standardization of the loading procedure, he said yes.

Asked how a new pilot was currently prepared for FlyNYON flights, he said Liberty did not allow brand new pilots to do it because they did not have the airspace experience. A seasoned pilot would go up on the flights as a passenger to watch a pilot go through the procedure, the loading, the straps, the briefings, the radio calls, the airspace, the altitudes, the camera shot locations, and how to get there. First, they saw a Powerpoint and then they would watch how it was done. The bulk of it was watching and observing.

Asked if he had had safety issues brought to his attention by anyone in the company, he said that had happened often. It would typically involve loose harnesses or broken phone holders, or a pilot would catch something that was not tied off before it got to the aircraft. Nothing had been brought to his attention that needed further looking into or that would require him to bring it to anyone else's attention. There was nothing reported that had not already been "out there."

Mr. Fabia was asked what he would do to resolve a pilot-reported concern, such as "I don't like this tailwind landing we're doing." He said the first thing he would try to do is see what

resolution they could come to, whether there was a solution to it. He would see if he could find a way to make the pilot comfortable. It would depend on whether it was an isolated incident or it was continuously happening. Ultimately, he would find a solution, bringing it up the chain of command if needed. Asked how he would do that, he said they used the pilot meetings as a forum to try to bring any concerns to light. It was supposed to be this very transparent thing. Everyone was using the pilot meetings for that. Asked whether such concerns were documented, he said pilot meeting minutes were created. They included what conclusions they had come to about solving the problem. Minutes were sent out to anyone who was involved in the meeting.

Asked to describe what he did when passengers arrived, he said he would greet them and check their weights. He would look at everyone's cameras to ensure nothing was loose, and make sure the harnesses fit. They would take a group pic at the helicopter. He would let them know that he and the CX would be putting life vests on them. They would also be checking everyone's equipment and harness to ensure that the harness fit properly. Most of the time he would be retightening the harness. He would make sure the hook knife was there and tell the passenger it was there. He would make sure their life vest was on and point out the pull tab for the life vest. After everyone was in their seatbelts, he would do a safety briefing on how to use the seatbelts and how to sit, when to take the seatbelt off and when to put it back on. He would tell them not to hang out of helicopter and not to put their limbs or head out. He would inform them about how cold it would be with the wind chill. He would brief them on a little bit of everything. He would tell them how, in the event of emergency he would let them know what to do. Sometimes he would need to mime what to do with the seatbelt if a passenger had limited English skills. He would do a visual check to ensure that every passenger had their hook knife.

Asked how he briefed the passengers on what to do in the event of an emergency, he said he gave them a "pretty generic statement" because there were any number of things that could happen. When it was freezing, he would do the briefing inside. Otherwise he did it outside in the helicopter. Briefing items included what to do with the seatbelt. When to have it on and off. He made sure they understood that they needed to keep their headsets on and that he would be communicating with them and in event of emergency. He would be informing them on what they needed to do. He would tell them what the winds were, how cold it was, and what might come of that. He would open it up to questions. 99% of the time when he briefed them they were in the helicopter and he was in the front seat.

Asked whether he put their seatbelts on or whether that was a CX duty, he said that per the SOP it was typically a CX job, however, if there was not a CX handy it was the pilot's responsibility. He always went around and made sure the seatbelts were on. Asked whether Liberty had a loader person, he said yes. He worked with the loader Tuesday-Sunday. Asked if his duties changed when the loader was not available, he said "not really."

Asked whether he attached the tethers to the passengers or the loader did, he said he still did. If he had a CX, they were attaching seatbelts and headsets and giving a generic briefing about the seatbelts - when to take them off and put them back on.

Asked how his duties changed with respect to the tethers if he was working with the loader, he said he would still attach the tethers himself. When the pilots originally wrote the SOP it was

geared toward the CX. He secured all his passengers. One would have to ask the other pilots whether they felt comfortable enough with the loader to let him attach the tethers.

Asked how often the pilot meetings were held, he said they were originally held weekly, then biweekly, and then they had ended. He thought they were being held biweekly again.

Asked if the passengers he had flown had been compliant with instructions, he said he had never had anyone loosen a tether. He had had passengers get unbuckled and he always briefed them in advance that if a belt came unbuckled they were not going to fall out and they should try to get re-buckled. He had never had anyone untether themselves. He had had them try to unbuckle their seatbelt and stand on the skid. With the guy who took his phone out he told him absolutely not and the guy was embarrassed and did nothing for the rest of the flight.

Asked if he had ever gone up on a FlyNYON flight as a customer, he said yes, pilots went up as passengers during their initial training. Asked if he was concerned about the process at that time or felt it was safe, he said he did not think it was unsafe. He was in the front seat flying with someone he trusted. He had his belt on.

Asked whether he ever had a concern about egress with the harness on, he said sure. It had been a thought of theirs, the pilots. With the product, there were unique difficulties, so yes. There was concern with anything he guessed. Asked to clarify whether he had concern with the product or the harnesses, he said his concern was always that someone was going to fall out.

In his mind, if he had to land on the water the floats would pop and everyone stay in the aircraft. Mr. Fabia was asked whether he could give an example of the unique challenges and risks he had said were associated with the operation. He said seagulls on the Passaic could fly into someone's eye. With doors on they did not have to worry about people or equipment falling out. He said a person could not fathom the wind coming through the cockpit. Headsets were getting blown off. He wondered what would happen if a headset was not attached or the zip tie broke or if it went into the tail rotor. Someone could decide to unclip themselves and jump out of the helicopter.

Asked what drove the change in frequency of the pilot safety meetings, he said the Liberty pilots had been banished from the pilot meetings. He thought that was a CX-driven conversation and just the pilots were not happy with how things were going and they more or less laid into NYON and when it got back to the CEO, the pilot meetings were dissolved. Because of his position and the frequency of the flights, he was asked back in by Christine Brown, FlyNYON's NYC lead pilot, because it was decided that the people flying should have some sort of say in the meeting.

Asked whether Christine advocated for the Liberty pilots to get back into the meetings, he said she had advocated to get him back in. Asked whether the pilot meetings were held at FlyNYON offices, he said it was a telephone conference call. Anyone could call in. Asked which FlyNYON pilots participated, he said those working in New York, Las Vegas, Florida, San Francisco, and Los Angeles. The call turned into less of a pilot meeting and more of a what is going on with FlyNYON.

Asked when NYON had excluded Liberty pilots from the meeting and when they were allowed back in, he said maybe 2.5-3 months ago the Liberty pilots were banished. He did not think he had personally missed any meetings. He was in the next meeting after the Liberty pilots were banished. Asked to confirm that he was the only Liberty pilot allowed in the pilot meetings after the Liberty pilots were banished, he said yes. He was the voice of the Liberty pilots and Christine was in charge of the meeting. She would ask if he had anything, otherwise he would sit quietly and listen.

Asked whether there were additional safety meetings held at Liberty just for the Liberty pilots, he said no, but if something new arose it would be discussed. Asked whether they had quarterly safety meetings at Liberty, he said yes, but not NYON-specific. Asked who ran those meetings, he said the Liberty safety officer. He had not run one yet. Asked when the next quarterly safety meeting was scheduled for the Liberty pilots he said he had been waiting for the new hire class to finish so they could benefit. They were going to be done in the next couple weeks.

Asked whether any Liberty pilots or other staff had ever brought up concerns about the harnesses and lanyards hindering passenger egress, he said yes and no. They knew there was a better way and for the last two months, Paul and he had been buying different tethers, knives, and cutters, and trying to find a foolproof system. They had come up with one about a month ago. They had found a great cutter and harness that did not change the system. Asked whether this new equipment was installed on the accident helicopter he said no.

Mr. Fabia was asked what the process was for introducing the change. He said Paul told him a while back that they were going to fix it, so that was what they were doing. Asked about the plan for installing the new system, he said it had first involved finding items that worked. The existing system worked because one could cut oneself out, but they were trying to improve on what was there.

Asked whether the company had taken steps to phase in the new devices yet or not, he said he had sent emails to the chief of staff and director of business operations at FlyNYON and he could not remember if the CEO was involved. He had shown them the new materials and how well the cutter worked. It could not have been any simpler.

Asked how the new devices were different from what was in the accident helicopter, he said the loops in the accident helicopter were very thick and made to withstand rock abrasion. The cutter was made to slice through something thin. They had found a tether that was thinner but with nearly equal strength (22 kilonewtons for the new tether versus 24 kilonewtons for the old tether) and a cutter with a 2-inch serrated slicing blade before the hook that just melted through the tethers like butter. They had found the knife first and that it worked great on the current tether and they went a step further and it cut like butter. Then they found the new tether and it was more easily cut.

Asked how long ago he had emailed the chief of staff and director of business operations at FlyNYON about the new devices, he said "maybe a month." Asked if he had received any feedback about the proposed change, he said that he had told them about it in a pilot meeting about a month ago that they had a new system, showed them the knife and the tether and said

they could be used with the same CX procedure. At the next meeting, two weeks ago, he told them the same thing. It was on the docket again. They had the information about where to get it, where to buy it, and who had it in stock. They had had that for a month at least. Asked whether anyone at FlyNYON had indicated whether they planned to follow up, he said, "Not with me." Asked what they said when he brought it up in the meetings, he said "Nothing really." He said that in those meetings everyone was talking over each other because it was a conference call, "So it was like okay good. What's the next subject. Let's talk about that."

Asked if he had ever cut the lanyard with a knife, he said yes, he had cut both types of lanyards with knives. Asked how challenging it was to cut the existing tether with the existing knife, he said it took some work. Asked how long he thought it would take to cut through the tether if he was strapped in, he said it would take him personally about 5 seconds. Asked whether he had concerns about typical passengers cutting it, he said yes. He understood how a seatbelt cutter worked and he had training. For someone who was not taking it seriously or had never held one of those knives before it was not going to be the same story, which was why they went to the new knife. It was essentially foolproof. Asked whether he thought the zip-tied headsets would hinder egress, he said the cord would pull out of socket.

Mr. Fabia was asked how the Liberty loader did with following the SOP, and what tasks he performed for Mr. Fabia. He said the loader put seatbelts on, attached headsets, and made sure people in the middle of the back seat knew how to rebuckle their seatbelts. The loader did a demo, talked to them about that, and let the ladies know to tie their hair back and their shoes extra tight. The loader did a good job being another set of pilot eyes. The loader had that pilot mindset – "what is the risk." He was a reliable second set of eyes and helped them get ready to go. Asked to describe the loader's competence with loading the passengers, he said the loader was "equal to the pilots."

Mr. Fabia was asked why it was standard procedure to criss-cross the lanyards for the passengers on the back seat. He said that they had found that when they had four people seated across the back it was possible for the outer people to exit the aircraft with their tether lying flat on the seat when attached to the closest anchor point. Attaching the tether to an anchor point on the opposite side of the helicopter prevented that.

Asked to characterize Liberty Helicopters management's attitude toward managing the safety of the operation, he said, "When we had concerns they were addressed." Asked the same question about FlyNYON, he said, "When we had concerns they were shut down."

Asked whether there had been a big change in the number of pilots at Liberty in the last year, he said no. Since he had started they had had a new hire class. A couple of people had left along the way for new jobs. They had lost some pilots. They had not had a massive influx or decrease in pilots.

Mr. Fabia was asked what training he had received for his role as safety officer and he said that his predecessor had briefly gone over the things he should be looking into and what the few responsibilities there were as far as life vests.

Asked whether there had been any change in how they were managing safety as a result of the company exiting the TOPS program, he said no, all their training was based on TOPS protocol. All of it was based on a safe way to fly.

He had flown with the accident pilot. Asked to characterize the accident pilot's proficiency compared to other Liberty pilots, he said if it had not been him, there would have been six fatalities. He was probably one of the most competent pilots there. He last saw him a week or two ago. They were on different schedules. They had had no recent interactions in the days before the accident.

Asked to describe the process for their pilots to speak up about safety issues, and whether there was any other deidentified or anonymous process to input safety concerns, he said that when he took the position he told all the pilots that if they wanted to speak up anonymously about any FlyNYON concerns they could bring it to him and he would bring it to FlyNYON's director of business operations so they could police themselves internally. Asked to clarify whether if a pilot had an issue with a FlyNYON employee they could take it to him, he said yes. Asked whether FlyNYON would usually shoot it down, he said it depended what they were talking about. Asked to describe a recent example where FlyNYON had dismissed a pilot safety concern, he said they had yellow and blue harnesses. Blue harnesses fit petite people much better. Small customers would sometimes come out in a yellow harness. A pilot would say they were not flying with that passenger, go get a blue harness. The CEO of NYON said there was no problem with the harnesses. They were not allowed to ask for the blue harnesses and that harnesses were essentially a bonus. They did not need to wear them.

Asked whether there was some regulatory requirement for the color, he said no they were just different harnesses. Asked to clarify whether the CEO said the harness was not required, he said "Per him you don't delay the flight based on the harness. Per Liberty, you'd better believe you're sending the passengers back. You have that privilege." Asked whether that was pressure from FlyNYON to operate in way that was contrary to what a pilot felt was safer, he said "Absolutely."

Asked to describe other examples, he said there was a call about weather. The pilots said it was too cold. They would lose feeling in our hands. The FlyNYON CEO "threw a fit." He put pressure on Liberty saying they should not turn down the flights and that Liberty needed the money. Liberty stood by the pilots, however. It was always a question in pilots' minds "how big an issue is this."

Mr. Fabia said he had 12 phone holders, and some were broken. He was not going to lose one and have it hit someone on the ground. FlyNYON said there was no problem with the phone holders. They would say it had worked so far and why were Liberty pilots trying to change it.

Asked whether Liberty was having financial difficulties, he said he did not know.

Asked whether he felt pressured to operate from the Liberty side, he said no.

He did not believe the position of safety officer was defined in their manuals. He had no written roles and responsibilities. He did not believe having a safety officer was required under the FAA regulations.

Asked why Liberty had a safety officer, he said it was a holdover from TOPS. He had come to the Liberty chief pilot and said he would like more involvement to help make things better. Even though the safety officer position was informal, he could help the pilots and help get things addressed.

The Liberty pilots did not have a union.

Asked whether he was familiar with SMS, he said, "Not really." Asked to confirm whether they had an SMS at Liberty, he said, "Not to my knowledge."

Asked how Liberty ensured pilots were performing things like the briefing in a consistent and standardized manner, he said he could only speculate. They had given the SOP training twice to all the pilots. They knew what needed to be said and what was on the line. He had spoken with NYON earlier about having the CX police the pilots. If a Liberty employee had an issue with the CX, they could bring it to him so he could address it. To date that had not happened.

Asked how Liberty ensured that the pilots were behaving in compliance with SOP, he said there was no way he could ensure every pilot was doing the right thing every time without micromanagement. Asked whether he did any spot observations of pilots doing their job, he said sure, but that was just him as a pilot checking if he saw them doing something not right, as a second set of eyes.

Liberty had a check airman. It was Paul Tramontana. He made sure that before he signed the pilots off they were all competent to fly the aircraft. Paul had not flown with him. He thought Paul was the only check pilot. Paul was also the Liberty chief pilot.

Liberty had approximately a dozen pilots.

Asked whether he currently had any question about the safety of the FlyNYON flights, he said that after having done hundreds of the flights he was aware that the wind could blow someone's headset off into his tail rotor. He was aware passengers could decide to take their phone out and it could drop over the city. Going into it, he had seen FlyNYON as an established company with procedures and a reputation and something that had worked and he did not know any better to question the procedure that was being used. Asked whether his experience had made him more aware of the risks, he said "correct."

Asked whether a risk assessment had ever been done on whether they should be doing this type of flying, he said he was not aware. Asked whether he knew what a risk assessment was, he said he understood the words. If he was asked to do one, he would think it was a risk-reward type of thing. He said that if he came across one he probably would not know what it was.

Asked to confirm that he had been let back in the safety meetings after the Liberty pilots were kicked out, he said “Yes, but I have been kicked out since.” Asked why, he said it was because he had disagreed with the FlyNYON CEO about something. During one of the pilot meetings the CEO was talking about getting his own pilots and having pilots that supported the brand and did not have allegiance to anyone else and he felt that as someone who had been “busting their ass for him” that that was an uncalled for. As a result of saying something to the CEO about it, he had been removed from FlyNYON flights and had his Slack account removed and his FlyNYON email address deleted.

Asked whether the pilot calls were a joint safety meeting, he said they were joint up until two or three months ago. Six months ago it was pilot meetings to discuss FlyNYON issues, pinpoint and fix them. Since the Liberty pilots were removed it became much more about what was going on in FlyNYON with the different locations. If there were concerns, if he wanted to tell Christi he had a real issue, she would put it on the agenda. No one else from Liberty was on the calls.

Asked to confirm his understanding that the FlyNYON CEO had said that the passenger harness was a bonus and not required, Mr. Fabia said that was not verbatim but it was the essence of what he had said.

Asked whether there were any concerns pilots had reported to FlyNYON that were dismissed, he said the biggest issue had been the harnesses and the phone cases forever. Getting properly fitting harnesses and buying more phone cases, because they are a life-limited part. FlyNYON was getting pretty upset that Liberty was finding broken ones.

Asked whether he thought the AS350 was a good platform for this kind of flying, he said he was biased because he had done R22 and R44 flying. He thought it was an incredibly capable platform for what they were trying to do. They were able to hover in any sort of tailwind.

Asked about typical altitudes and airspeeds, he said going out to the city they usually tried to get up to 2,000 feet. It depended on what the passengers wanted to see. Anywhere from 500 to 2,000 feet was where they normally operated. They would go up to 3,500 feet if they wanted to go over the TFR.

They kept the airspeed below 100 knots with the doors off. They tried not to go that fast. They would fly 100 knots out to the city and 60 knots over the city for picture taking. It depended on what the passengers wanted to see. He could only speak for himself.

Asked whether the Liberty chief pilot had done any training with him or whether he had another CFI, he said Brent Duca did his initial training. He was handed off for the final check ride.

He did not receive any extra compensation for serving as safety officer. He had not received any training for his position as a safety officer.

He was vaguely familiar with the Appareo Vision 1000 unit installed on the helicopter. He said it was his understanding that it would turn on if something catastrophic happened.

Asked if there was documentation of any concerns in the minutes of the safety meetings, he said there were minutes for the pilot meetings.

Asked whether hazard or incident reporting forms went through him, he said nothing had come up that would warrant that since he took the position. They did have hazard reports.

Asked to clarify who attended the pilot meetings, he said it used to be all the Liberty pilots could attend the conference call. It included a rep from the CX, normally their manager Moe, or his younger brother Houss. It would include Ethan, Jill or Jenna, and the CEO. Paul was involved before they ended. The DO for Liberty might have been on one or two of them. It was really for the pilots because they were the ones that were coming across new things to fix.

Mr. Fabia was asked whether, when he was talking about the pilots getting together and developing the SOP, he meant both Liberty and NYON pilots. He said Christi, the Liberty pilots, the Liberty DO, and NYON management were involved. He did not think the other NYON locations were up and running yet at that time, he was not certain. Those initial meetings were really New York issue focused. Asked when they began, he was not sure, perhaps June or July. It occurred when Liberty started really taking over the bulk of the NYON flights.

Asked whether the pilot meetings were done via telecon, he said yes. Asked whether they initially included most of the Liberty pilots, one NYON pilot, and NYON management, he said yes. Asked whether NYON initially had only one pilot on the call he said yes.

Asked which NYON managers participated, he said every meeting was different. The FlyNYON CEO was there for a bunch of them. The director of business operations joined the calls after he came on board. Nick or Tyler from operations might have also. Moe or a CX rep. Perhaps also Jill, perhaps Jenna. It was whoever wanted to call in for each meeting. It was an unofficial meeting. Asked who set the agenda, he said it was Christi. Asked to describe her role at FlyNYON, he said he was not sure. She was a pilot. The meetings were initially every week, then every two weeks. They went to every two weeks in November. It went biweekly when the Liberty pilots were removed because there were a lot less issues. Asked whether the meetings had continued to occur every two weeks since that time, he said yes, "give or take." Christi was the organizer and sometimes she would have a flight or there would be nothing good on the docket.

Asked whether the need for an SOP had been raised during the weekly meetings, he said yes. The Liberty pilots said it was chaos, they were sending people over who did not know what was going on. Liberty thought this was NYON's product, so they needed to develop it, but he had spoken with Paul and Paul said you can take the bull by the horns and do something, so Mr. Fabia developed it and Brent approved it.

Asked to clarify whether the pilot meeting became more of a management call after NYON's other bases were established, he said he did not know if that was what happened. They just had Brian from Las Vegas, and another pilot calling in from Los Angeles. Asked whether the change in the nature of the call was progressive, he said he did not know NYON's history. Investigators

would have to ask them when the other locations became more prominent. Initially they were saying they needed a CX out there, more tethers, and more phone holders.

Mr. Fabia was asked when the meetings stopped altogether. He said it had stopped because a bunch of flights had gone out and the NYON kids did not know what was going on and there was no weights and someone did not have a phone holder and it unclear who was supposed to go to what aircraft. That was a bad pilot meeting because none of the NYON higher-ups were on that one for whatever reason, and it was basically just the pilots laying into the CX manager Moe. All of this fell on him because he was responsible for training them and he was not training them. Mr. Fabia said something to the CEO. When the minutes came out stating that the pilots could ask for a blue harness and other things, the response was that the pilots did not make the rules, they did, and the next thing he knew the pilot meetings were suspended.

Asked whether the meetings started up again, he said yes, but that was when they began holding them without the Liberty pilots. He said something to Christi about how it was “pretty stupid” that they were going to be having these meetings without the people doing the flights, and she advocated to get someone back in and it happened to be Mr. Fabia because he was very involved with all of it. It went from an open forum when it first started to a docket. When the pilots brought something to his attention, he had to remember to tell Christi to put it on the docket, like about passengers being unbuckled. Otherwise, he had to just listen and report important news back to the Liberty pilots.

Asked when he was recently kicked off the meetings, he said he was removed from them “last week.” He said he was included in a text message saying that FlyNYON no longer required his services. Mr. Fabia said he wanted to clarify that he was not kicked off for raising a safety-related issue, it was more of a personal conflict. He had objected to what the CEO was saying about Liberty pilots and he was taken off the calls.

Asked whether FlyNYON knew what pilots Liberty assigned to their flights, Mr. Fabia said the flight sheet they got was signed off by NYON operations people who worked alongside Liberty operations. They checked to make sure the weights were on it. They knew Fabia flew helicopter 2LH, and that was where they were sending the green-banded passengers. He said that when Liberty operations was building the board, they were informed that Fabia was doing tours and charters rather than NYON flights. Asked whether that decision was made at NYON, he said he supposed so.

Asked whether Liberty had hazard reports, he said they had it, but they had not used it. They ran it through the pilot meetings. They ran safety issues through pilot meetings, which they had when necessary. Asked what would constitute necessary, she said if, after landing, a passenger let themselves out and walked toward the tail rotor, or if a CX was wandering around with a camera while the helicopter was taking off. Hazard reports were more for something that could be stoppable in the future. If a passenger did something stupid they were never going to see them again. Amongst the pilots, if anything happened like a guy took a phone out of a case or undid something, that was just discussed among pilots informally.

Mr. Fabia had found some of the reports and hung them up so the pilots could see what had happened and what it looked like.

Asked whether he had obtained input from other pilots on the SOPs, he said “Absolutely.” Asked when he had finished them and provided them to pilots, he said he would have to check his email to see when he sent a rough draft to Brent. He thought it was early August.

Asked whether he had obtained input from NYON on the SOPs, from Christi, he said “Yes and no.” More no because they knew what their SOPs were already and they took that and made it better. They did not care if NYON really liked it. This was what Liberty felt was safe. He had talked to Christi about it and she was at the training and they had made other revisions, but they did not get NYON’s approval. That was how Liberty was going to operate the flights.

Asked whether he had emailed Jill and Ethan about the proposed new harness and tether and knife and whether they knew about it, he said his orders had come from Paul that they needed to get on this. He had assumed that had come down through NYON. It may not have been. Whether they knew Liberty was trying to come up with this he did not know. He knew it had been addressed in previous pilot meetings. Once given to him it was 2 or 3 weeks they were trying things out in different combinations. Mr. Fabia had emailed it to Jeff and Jillian. He had also emailed it to Paul. He had emailed it to Jillian and Ethan because they were the ones who were going to buy it. In the next two pilot meetings it was discussed also. Asked whether NYON leadership was on those calls, he said they were invited. The last meeting the CEO was there but he was not in the ones prior. They were all supposed to be.

Asked whether, when the pilots were excluded from the NYON meeting, there was any pushback from the Liberty DO saying that the Liberty pilots needed to stay involved in pilot safety meetings, he said “Not to my knowledge.” Asked whether there had been any pushback from other Liberty managers, he said “Not to my knowledge.” Asked if Paul was aware that the liberty pilots had been excluded, he said they had not been banned, they were suspended, and then Christi told him a pilot meeting was going on and he let Paul know. Christi got him back involved. Anything that came up he would let Paul know. Asked whether he had discussed the situation with the Liberty DO or knew if he was aware, he said, no, and he did not know.

When asked if there was anything relevant to the investigation that he had not been asked about that he would like to share, he said no.

He clarified that the tether and cutter were the proposed new things.

Asked when the blue harness had been introduced, he said about four months ago. It was well liked and they got one more, and then two more. As of maybe two months ago they had five or six of them. Asked whether the yellow harnesses worked equally well and if the blue harness were only better for small people, he said the blue harness was superior because it had two attachment points – one at center of back and one at small of back which prevented people from shifting their hips out of aircraft while still leaning forward, and if you had to undo the carabiner you could reach the lower one, so it facilitate egress, which is why the pilots advocated for its use as much as possible. Asked whether he would attach it to the lower attachment point, he said

he gave the passenger the option, but he always pushed for the lower one. It was however they were more comfortable. Some were more comfortable with a higher attachment point.

Asked if there was any doubt in his mind that the CEO FlyNYON was aware of his role as a safety officer at Liberty, he said maybe, but he did not know.

Mr. Fabia was asked how air tour flights were different from NYON flights and he said air tour involved a prescribed route established with Newark and LaGuardia with prescribed altitudes and turns. Asked whether ATC was aware of where the helicopter, he said all the operators doing NYC tours were doing one of three things. Liberty did Alpha and Bravo tours. Others do a different route. Asked whether a tour was a more structured flight, he said sure, one could say that. Asked whether a photo flight route was more variable, he said absolutely. There were places they were able to see on a photo flight that they were unable to see during a regular tour. During a photo flight he would ask Newark tower “I would like to go on station for downtown, now I’d like to leave. Newark I’d like to go on station at governor’s island, now I’d like to leave.” Asked whether there was anything stopping them from deviating from prescribed tour routes on a tour, he said that was against company policy.

The interview concluded at 1600.

5.0 Interviewee: Jillian O’Brien, NYONair Chief of Staff

Representative: Diana Gurfel, Condon & Forsyth LLP

Date / Time: March 16, 2018 / 1025 EDT

Location: NYONair Offices

Present: David Lawrence, Van McKenny, Emily Gibson, Bill Bramble–
NTSB; Victor Mevo – FAA; Paul Tramontana – Liberty Helicopters; Manny Figlia- Airbus;
Brian Rosenberg, Ethan Fang – NYONair

During the interview she stated the following information:

Before joining NYONair she was involved in fashion photography in New York City. She had a B.S. from Penn State in fine arts concentrating in photography.

She began working for NYONair in October of 2014. The company was just board members at that time. She was essentially a secretary for the four of them. The board members were Patrick Day, Tim Orr, and Vin Farrell. All three were still currently board members. Her position had evolved over time, they had just added additional responsibilities and changed her title.

Her responsibilities included being a liaison between the CEO and the rest of company and managing the CEO’s schedule. She reported directly to Patrick Day. Asked who reported to her, she said no one directly, but essentially everyone else in the company was below her. Asked whether people had to talk to her if they wanted to talk to the CEO, she said yes.

She was not a pilot and had no aviation experience.

Asked how many employees there were at NYONair she said about 40 full time, and about 80 were involved in some fashion. The vast majority were based in Kearny, NJ. That was the company's headquarters. Other operational locations included Miami, Las Vegas, Los Angeles, and San Francisco. They provided the same products in those locations as FlyNYON in NY. They did photo flights.

Asked how many helicopters there were at each location she said there was one in New York, one in Las Vegas, and one in Miami, but the ones in Las Vegas and Miami were being brought back to New York. The company had two pilots in New York, one full time and three part-time in Las Vegas, two in Los Angeles, and one in Miami.

Asked if she knew how many customers they flew per month or year, she said not off the top of her head. Maybe one flight a week in the other markets, whereas they operated seven days a week in NYC.

Asked what the company was doing when she first started, she said that when she joined the company it was primarily a production company. They had a gyro-stabilized system and used it to shoot movies and commercials and to fly professional photographers. It was recommended that they start to put the business out on social media, so they started sharing images on those platforms. People following asked how they could do it also, so they began offering photo flights. Booking the helicopter was very expensive but breaking up the seats and selling them individually allowed many more people to have the experience and that was what the company had morphed into.

Asked whether the company had initially begun operating with the doors off and people tethered, she said they had begun using tethers before her time. She had gone on her first flight a week or two after she joined, and the process was the largely same. That was before they started crowd-sourcing the flights.

Asked to confirm whether the idea of the tethers and harnesses had existed before she arrived at the company, she said it had come before the idea of flying a lot of people. Professional photographers would use the same kind of harnesses for their shoots, for real estate and so forth.

Asked when they started bringing more people in, she said that had happened shortly after she started. Their first flight was in 2014. Someone booked the whole helicopter. In the middle of 2015 they got into having people share the cost.

Asked when contracting with another operator began, she said she would have to check, but as the business grew there was need for additional helicopters. Asked how they decided to use Liberty Helicopters, she said Liberty had been in the same hangar for as long as she could remember. They were familiar faces, they were comfortable with the operation, they had a lot of ties, and they were comfortable with Liberty as a whole.

Asked how Liberty was approached about the idea, she said not formally. Asked about Liberty's reaction she said that to her knowledge there was no pushback. They began using Liberty in large quantities less than a year ago. Asked about training for Liberty pilots, she said they had an

SOP. They had created it less than a year ago. Asked whether FlyNYON's only training guidance was in the SOP, she said in a formal sense yes. Asked how the New York pilots were trained, she said they were sent an onboarding document. They were trained using the SOP. Pre-SOP it was done through human interaction, through FlyNYON people speaking with each other. Once outside operators began to be used the SOP was formed. Everything up until that point had been verbal. New pilots were familiarized with the SOP by Christi Brown, the NYC lead pilot. The onboarding doc they had was always part of that training.

Asked whether NYONair held safety meetings, she said they had a pilot meeting weekly and it was essentially an open forum. If anyone had something to discuss, they created an agenda prior and it hit all those points. Asked who would attend the meeting, he said all the pilots in all the cities would join each other on a conference call. Asked whether it was just NYON pilots or included contract pilots, she said contract pilots as well. Asked whether it included all the Liberty pilots, she said it had morphed. There was a time it was all the pilots. Currently it was all NYON pilots and on their last pilot call it was Scott Fabia representing the Liberty pilots.

Asked what kind of issues were discussed, she said she had been very busy and was not attending the meetings lately. Nothing was coming to mind as a recurrent topic. Asked whether she scheduled the meetings, she said Christi scheduled them and they appeared on the calendar.

Asked who was on the call besides the pilots, herself, and Pat, she said Moe, the rep for the NYC terminal CX people, and Ethan. Asked whether Christi ran the meetings she said yes. Asked who created the agenda for the meetings, she said Christi. Asked if the meetings occurred weekly she said they tried, but sometimes it got pushed.

Asked if there were any concerns expressed that she was aware of about the conduct of the flights or tethering, she said anyone could bring anything to their attention. They were currently in the process of changing the tethers and they were looking to replace it with was something of the same style or was slightly thinner.

Asked what was meant by the same style, she said individual loops. The reason they went with that type of tether was to adjust the length of each person's tether. Asked if the new tether was thinner, she said it was made of a different material. It was not as heavy. It was a lighter construction. Asked about the purpose of the new tether, she said she was unaware exactly.

Asked who initiated the process to find and evaluate the new tether, she said it was the pilots collectively. Asked why they wanted a new tether, she said she did not think she could factually respond to that. Asked whether there was some reason, such as to make it better or lighter weight, she said she believed it was the lighter weight. Asked why that would be important, she said that the tethers they were using were meant for an immense amount of weight. An elephant could be held by them. It was almost overkill.

Asked whether the new tethers would have less load-bearing capability, she said she was not sure that was the reason but she believed that was the case.

Asked whether the pilots wanted to make any other changes, she said not that she was aware of. Asked if ground crews had ever approached her with any problems, she said in recent times no. They had started to come up with ways to tether gear that they did not always see, like a cinema camera, to make sure they could tether that gear to a harness without being surprised when it arrived.

Asked what would happen if such gear arrived, she said the CX reps would find a way creatively or standardly to tether that item, however everything was left to pilot's discretion. If they were uncomfortable with how it was hooked up, they would tell the customer they could not bring it. That was in the company's terms and conditions.

Asked whether ground crews had come back with any safety concerns about how things were being conducted on the flight line or general safety concerns she said no. They had had conversations about efficiencies because, for example, there was no formal process about whether to tether the front or back people first, so it was collaborative between CX and the pilot to determine what made the most sense.

Asked whether FlyNYON was still doing photo ops currently, she said no they were not currently doing them at any locations. Part 135 charter operations were continuing.

Asked how it was disseminated through the company that they were going to stop doing the flights, she said she believed they were notified via Slack, a messaging tool, but she would have to check. Everyone was a bit shaken up so there had not been a lot of pushback there. She would have to check whether they had also been notified some other way. There had been a lot of ripple conversations. The decision was made the day of the accident.

Asked how they were notified about the accident, she said she was unfortunately departing on a commercial flight to Miami for work and she was informed via text message. It was a group text. It said helicopter 0LH was in the river. That was the extent of the information they received, and it was received as they were taking off. During the flight the wifi worked. They learned they had two fatalities. That was not confirmed, but it was spoken about at that time. She could not recall if they learned that it had flipped until afterward. After landing in Miami she booked a flight home.

Asked whether NYONair had a process for reporting safety concerns, she said not a formal one. Asked whether pilot meetings were another venue for reporting concerns she said absolutely. Asked where safety concerns would go if they were reported on the call, she said Christi emailed the minutes of each meeting. They were disseminated to everyone on the call and to Pat and herself and Jenna, their assistant GM. Asked whether the minutes were reviewed, she said yes. Asked whether they were given to folks for action, she said if action was needed it was handled.

Asked who was responsible for the decision to replace the tethers, she said there was influence from the Liberty pilots about making that change. Asked who would be responsible for sourcing the materials, she said Scott Fabia was responsible. Asked to clarify whether she could remember what the concern was with the existing tether, she was not sure but she thought the weight was the main concern she recalled. The second one was thinner. The first one was very thick.

Asked whether the company terms and conditions always left things to the pilots' discretion, she said absolutely. Asked whether they got a lot of incidents where the pilots were not comfortable, she said not many. Asked whether there had been any discussion about harnesses, she said the fit of the harness had always been of concern. Their large concern had been people falling out of the helicopter, so they did not want the harness to be ill-fitting. Asked whether there had been instances of pilots refusing to take a flight, she said there had never been an incident of a pilot refusing a passenger. Asked whether the pilots felt pressured if they brought an issue to her attention, she said she was confident they would not fly the mission if they were uncomfortable.

Asked when FlyNYON would resume flights, she said that was undecided.

Asked why they were moving helicopters back to New York, she said they planned to begin operating again, and moving the aircraft there was being done with that intention.

Asked whether all pilots were included in the pilot meetings she said no, it had gotten up to 45 people on the call at one point. Asked whether that was the reason Liberty pilots were asked not to participate, she said one person was allowed to participate, not an exponential number. Asked whether Scott was the rep for the Liberty pilots she said yes. Asked whether he received the minutes she said yes. Asked whether she had the minutes, she said yes. They did not delete their emails. Minutes were sent via email.

Asked whether Liberty was the first contractor for NYON, she said it was the first one in New York. Asked whether there was no documentation on how they trained their pilots prior to working with Liberty, she said not aside from the onboarding process, no. Asked whether the SOPs were developed in conjunction with Liberty, she said that was a question for Christi or Brian. Asked whether they had pilots in San Francisco she said no. They had one in Los Angeles.

Asked about the source of the safety award on the front desk at FlyNYON headquarters, she said it was from the Eastern Region Helicopter Council. They had awarded them the safety award that year.

Asked how FlyNYON's restraint system was originally developed, she said she did not know. Asked what iterations and changes it had gone through, she said the tether had changed since she came on board. The original was a continuous loop and you could not easily adjust the loop, hence the change. They never wanted people to get too far outside the airframe.

Asked about the use of blue versus yellow harnesses, she said the yellow harness had been with them since inception. She believed the blue harness had an FAA approval for search and rescue. They had quite a few and they are able to be made much smaller. They had begun using them within the last year. She would have to look up the date. Asked if the procedure for securing the forward lanyard had changed over time, she said not that she was aware. Asked if there had been a risk analysis done pertaining to the use of the restraint system she said there had not. Asked whether the company had done a full evacuation simulation with a full load of passengers using the knives to egress, she said that had not been done.

Asked whether the knives they used had changed since she had been with the company, she said the style had not changed but they had purchased two different brands. Asked whether both brands were currently in use, she said correct. Asked whether the two types were pretty similar, she said the style was essentially identical.

Asked whether anyone had raised the issue of a possible conflict between the forward restraint system and the aircraft controls prior to the accident she said not that she was aware of. Asked if there was a procedure for securing excess length on the forward lanyard she said she did not believe so. Asked if there had been reports of safety-related concerns regarding the forward passenger restraint system she said no.

Asked when the pilot meetings had begun, she said she would have to look up the date. Asked whether Liberty pilot safety concerns were raised during those meetings, she said she was not often on those calls. Asked whether pilot concerns of any sort had been expressed about the restraint system, she said the one discussion they had had was about the tethers. Asked whether that was a safety-related concern, she said she did not know. She did not think she could factually answer that.

Asked if pilots had expressed concern about the cell phone holders that the company used, she said she knew many of the pilots cinched them down very tight and cracked them, but she knew a phone had never been entirely refused. If a holder was cracked, they would bring another. Asked whether pilots could refuse to bring a phone, she said yes. It was their aircraft. They could never pressure the pilots into that.

Asked whether the pilots had discretion over whether passengers used a blue versus a yellow harness, she said yes. Asked whether the CEO of NYONair ever said the pilots did not have discretion to refuse a yellow harness and request a blue harness, she said that nobody was asked to do anything unsafe and that Pat would share in that sentiment.

Asked whether pilots had expressed concerns about conducting cold-weather flights, she said that was something that had been extensively discussed this winter. Ultimately everything was the pilot's decision.

Asked whether there was any procedure developed for when it was too cold, she said there were formalities having to do with temperatures and pilot breaks between the flights.

Ms. O'Brien was asked whether Liberty's safety officer had identified new products for the restraint and cutting tool approximately a month before the accident and she said he had done so 6 days before the accident. She had pulled up an email that indicated to the pilots that they were going to go through with the safety officer's recommendation. She said that order had not been placed. Asked whether a decision to replace them had been made before the accident, she said yes.

Asked again the reason for paring the number of Liberty pilots on the pilot meeting call down to one she said the calls were not particularly productive with 40 participants. Asked whether the Liberty safety officer was removed from the pilot meetings, she said no, he had participated in

the last pilot meeting and received the minutes. Asked whether his FlyNYON email had since been deleted and he had been removed from the company's Slack communication system and barred from flying FlyNYON flights, she said yes. Asked why that had occurred, she said she could not factually answer that. It had not been her decision. Asked if she was aware of the reason for the decision, she said yes. Asked for her understanding of the reason, she said that after the last pilot meeting, the NYONair CEO had received a complaint from the safety officer via Slack. Asked about the nature of the complaint she said that he had questioned something the CEO said on the call. He was unhappy with it. Asked whether it was safety-related, she said no.

Ms. O'Brien was asked whether it was the company's intention to include Scott in future pilot meetings, she said that had not been decided or discussed. Asked when the last pilot meeting had occurred before the accident, she said March 7 and Scott was in that meeting.

Asked whether there was an intention to include Liberty in the calls going forward, she said it was not discussed but there was no reason they would exclude them entirely.

Asked how she would characterize FlyNYON's company culture with respect to safety, she said safety was their number one priority. She would personally not feel comfortable if she could not go to bed knowing they did everything they could think of to keep their passengers and customers as safe as possible and she was very saddened that this had occurred.

Ms. O'Brien was asked whether NYON had 6 pilots and Liberty had about a dozen, she said she did not know the number off the top of her head. Liberty had more than NYON. Asked to confirm whether the Liberty pilots were the only ones excluded and that they only had one pilot represented on the pilot meetings toward the end, she said yes. Asked whether that was currently the case, she said yes. Asked whether the 6 NYON pilots were currently included, she said yes but they were not always all available and present during the meetings.

Asked whether the operation was making flights when she first began working for the company as a secretary she said yes it was doing production work and flying photographers. Asked whether NYON had taken up 5 photographers at once during the production flights, she said no. Asked whether the passenger-carrying aerial photo tour was the first time the company was flying five tethered passengers at a time, she said yes. Asked whether there was no risk analysis performed on the tethering system by NYON or the flight department, she said correct. Asked whether she was aware if Liberty had done one she said she was not aware.

Asked when the Miami operation had begun, she said it was the first city they had expanded to more than two years ago. Their first trip in Las Vegas had occurred in December 2016. In Los Angeles there was a company called Air360 operating one of NYON's B3s and 2 of their pilots were on NYON's 135 certificate. The California operations had begun within the last year. Asked whether Air360 was under contract like Liberty she said she did not know exactly what the paperwork was, but it was a similar concept. Asked whether Air360 was flying under their own certificate or NYON's she said FlyNYON was Part 91, but they maintained the aircraft in accordance with Part 135. Asked to describe the nature of Air360, she said that they had a separate operation running in parallel currently. She was unaware if they had their own

certificate. That was a question for Pat. Asked whether any companies other than Liberty or Air360 were doing NYON flights she said no.

Asked to describe the difference between NYONair and the entity that did the booking for the accident flight, she said that FlyNYON was a subsidiary of NYONair. Passengers were booked through FlyNYON. She believed FlyNYON did not have its own Part 135 certificate but said Pat could clarify that. FlyNYON marketed the flights.

Asked to identify the director of flight operations for NYON she said it was Pat Day Sr. Asked whether she had any Interactions with Pat Day Sr, she said her interactions with him were minimal. It was not really her area of responsibility to interact with him or the flight department. Asked whether she had minimal interaction with the flight department, she said correct. Asked why she was on the pilot meeting calls, she said because she managed communications and people's schedules.

Asked whether she had ever seen Pat Day Sr. at NYON's offices, she said occasionally he had meetings yes. Asked to elaborate on how often she meant by occasionally, she said she would have to look back, but it was not entirely minimal. Perhaps weekly. Asked whether he would come in for the entire day when he came over, and whether he had an office, she said he had a desk in an office that he shared with FlyNYON's accountant.

Asked to identify NYON's POI she said she did not know. Asked how often she saw him, she said she was not sure they had ever met. Asked how often the CEO saw him, she said her background was not in aviation, so although she knew who was being spoken about she would have to look through her calendar.

Asked if NYONair had a safety officer, she said she did not know. Asked again about the nature of the Safety Award NYON had received, she said it was from the Eastern Region Helicopter Council. It was an independent award given to companies every year at Eastern Region's banquet. Asked whether the Eastern Region had sent them the award, she said they had attended the banquet.

Asked whether she was familiar with any third-party audits NYON had undergone, she said she did not know if they had undergone any. Asked if she was familiar with Tour Operators Program of Safety, she said yes, minimally. Asked whether NYON had participated in any of those audits, she said not that she was aware.

Asked if CX was short for customer experience she said yes. Asked whether all the CX personnel were NYONair employees, she said she believed their pay stubs said FlyNYON LLC. Asked to describe Foxtrot, she said it was a name they had recently developed and planned to use for their charter 135 division. Asked under what name their 135 charters were currently being conducted she said to ask Pat.

Asked what was meant by NYON's terminal she said it was their retail space on the ground floor of their headquarters. Asked if there were any other subsidiaries of NYONair, she said Foxtrot was being formed. Hangar 95 (the production company) had been recently sold.

Asked whether 6 NYON pilots and 12 Liberty pilots, her and Pat added to 45 participants in the pilot meetings, she said 45 might have been an incorrect number, but it was a lot of people. She had had to get another conference line. Asked who else was on the calls, she said the NYON operations rep and CX rep. All were in-house there in New Jersey. Asked how many people could fit on one conference call line, she said they could now fit 50. The old line had been limited to 10 or 12. They had had to upgrade.

Asked how the NTSB should describe the type of company that was FlyNYON, she said it was a brand. They were not an operator, she would call them a marketing company that sold one specific product. She did not know the name on their Part 135 certificate.

Asked if she had any other relevant information to add to the investigation she said no.

The interview concluded at 1209.

6.0 Interviewee: Christie Brown, NYON Lead Pilot

Representative: David J. Harrington, Condon and Forsyth LLP

Date / Time: March 16, 2018 / 1230 EDT

Location: NYONair offices

Present: David Lawrence, Van McKenny, Emily Gibson, Bill Bramble– NTSB; Victor Mevo – FAA; Paul Tramontana – Liberty; Manny Figlia- Airbus; Brian Rosenberg, Ethan Fang – NYONair

During the interview, Captain Brown stated the following:

Her name was Christine Brown, and she was a lead pilot for NYONair. Her background included being a civil engineer by trade, having worked at Chevron for about 3 years. She went to flight school for helicopters and airplanes and held a commercial helicopter certificate and private pilot airplane certificate. She was also a CFI in helicopters, instrument rated. She worked as a flight instructor in New Jersey until she was hired at Liberty in 2014. In January 2016, she was hired by NYONair.

She had about 3,500 flight hours, the majority of which were in helicopters. She also had about 100 hours of fixed wing time. For NYONair, she flew about 30 hours per month, depending on the season, which could go up to about 50-60 hours per month during the in-season. She primarily flew the Twinstar AS-355 and had over 500 hours in that model, and the A-Star AS-350 B3. The remaining portion of her flight time was in the Robinson R-22 and R-44 helicopters. She had over 1,000 hours in the A-star, with 500 hours in the Twin Star. The rest of her flight time was in the R22 and others.

Her title at NYONair was NYC lead pilot, and her primary duties were to fly charters and aerial photo flights, hold pilot calls every other week, and interface with the pilots. The pilot calls would discuss any issues or concerns and new operations, on-board (or training) of the new pilots, and discuss procedures specific to FlyNYON.

She would train the new pilots on their procedures specific to FlyNYON, and not aircraft training. The FlyNYON procedures were related to customer interaction, aerial photography, loading and harnessing.

Training for the FlyNYON procedures was accomplished through a powerpoint presentation that she created, and the SOPs that were developed by Liberty. There was hands-on training where she would work with a new pilot in the hanger and the proper use of the harness, tether, and entire process from the time the passenger arrived, boarded the aircraft, and then exited the aircraft.

Actual aircraft training was accomplished in the aircraft using dual controls, and flights with actual passengers with an experienced pilot onboard to ensure the procedures were done correctly. She monitored the progress of the new pilots, who were typically proficient after about 3 flights since they were all experienced pilots.

She said she trained both NYONair and Liberty pilots on the FlyNYON procedures. She did not know what other training Liberty provided to their pilots.

She said the pilot safety meetings had been running for quite a while; for at least a year. She did not know if there had been pilot safety meetings prior to Liberty operating the FlyNYON flights. The need for the call-in meetings was for standardization of the procedures, safety, and working for better solutions. It was a platform for discussion, but she did not know who started the scheduling of the meetings, but it was not her. They initially were held once a week, and the topics typically included operations, safety issues, training, and CX's. Initially all the pilots were invited to call in and included whoever could call in from the NYONair operations. All NYONair operations were managed from the NYONair operations office. For the call-in, participation from NYONair included anyone who was in operation that day. It normally included the manager of CX, and she thought that was either Moe or Huss. Participation varied up to 30 people on the call.

Some of the topics included safety issues. She did not recall every issue brought up, but some included cold weather ops, and pilots getting cold from the winter flights. They made a solution for that. She could not recall any other safety issues.

When asked if anyone from management was on the conference calls, she stated that there usually was someone from management on the call, but it depended on the day. Patrick (CEO) would try to call in whenever he could. Brian, the chief pilot, was on, and Paul (Liberty Chief Pilot) was on a few calls. The documentation of the issues and who were assigned actions were put in the minutes. Any reporting of actions completed would be done during the next conference call. Even though she was not required to report a closed action, she would report it to Pat Day (CEO), and now she reported it the Chief Pilot. She said she could call Pat with any issues she had, and there was an open line of communications to him.

Actions that were assigned were recorded for reporting at the next meeting, and they would report if the action item was closed. She said she reported to Pat Day and could call him with any issues.

She said she first started flying the FlyNYON flights between January and the summer of 2015 while she was still employed with Liberty. Her general reaction to the FlyNYON flights was that she was comfortable with them as long as she checked her passenger's security, which she did for each flight, to ensure they were safe.

She felt it was safe, otherwise she would not have flown the flight. She never had any concerns or problems with the tethers or the passengers on the FlyNYON flights and had no close calls regarding the passengers or hardware and equipment. She stated that she had probably done close to 1,000 of the FlyNYON flights.

When asked why the number of pilots on the safety meeting calls was reduced, she said that according to Pat, the calls were becoming an open forum and were not being run efficiently. He wanted to assign a point person from each group to participate so the calls could run more efficiently. That occurred about January 2018. The point people assigned to the call included her, operations, CX, any management, Brian, one representative from each location, and the Liberty safety pilot (Scott). In January or February, the meeting schedule was changed to bi-weekly so that they were not having a meeting just to have a meeting.

When asked if she knew that the Liberty safety pilot had been removed from the conference call invite, she said that it stemmed from a personal conversation between Pat (CEO) and Scott, and she was not privy to any additional information. That had occurred at the most recent pilot call on March 7. There had not been a conference call since. Pat sent a group text to all informing of the decision to remove Scott from future calls. She also stated that she had no intention of replacing Scott's position on the call because she intended to contact him directly, asking if he had any issues that that he would like her to bring up at the meeting. She said that she still believed Liberty pilot input was very important.

She said she trained both Liberty and NYONair pilots on FlyNYON procedures. It included safety procedures where she would greet the passengers, look at passengers to verify they looked about that weight they had on the flight sheet, looked over all the harnesses, the passengers were secured properly, looked for items to make sure they were tethered properly with nothing in pockets, shoes secured, long hair tied back, and how they seemed prior to the flight and if they needed additional talking to if they were nervous. She would ask the passengers what they wanted to see during the flight, and what she could do to help them get the photo shot they wanted.

She would tether them into the aircraft individually, brief them on how to get out of the aircraft in an emergency, and made sure they had their seat belts on. She would also check the zip-tie for the headsets so it would not blow off, and then do a final walk-around. There was an additional safety briefing on the exits, life jackets, fire extinguisher, and knife on the harness. After that, they were ready to go.

She would tether the passengers, and the CX would help buckle them into their seat belts prior to the takeoff. The briefing included the passengers listening to her, telling them she would let them know what to do in an emergency, not inflate the life vests in the aircraft, and multiple ways on how to get out of the harness and tether. She said she would show the knife to the passengers. There were no specific commands the passengers were supposed to listen for.

The two center passengers were allowed to move to the floor in flight and she would brief them when to get back in their seats and buckle up for landing.

The passenger up front was also tethered in. The tether could be long. When asked if there was any excess that hung near the fuel control lever, she said yes, she had seen that before.

Their passengers are generally compliant. If they take their seat belts off, they were compliant when she would tell them to put them back on.

When asked if there was an agenda for the pilot meetings, she said yes, and she would send that out prior to the meeting; there was a structure to the meetings. She would send the minutes to the meeting to everybody on the call, and Scott. She also did not send them to everyone at NYONair, but Pat Day did get a copy, as well as Jill, Ethan and the directors. The minutes could be forwarded to anyone.

When asked if there were any safety concerns about the harnesses or tethers brought up in the meetings, she said informally to her after meetings, and included in the meetings after it was brought up to her. For the harness, they wanted to find a better harness, and an FAA certified one, but she did not think that was a safety issue. We felt the harness was sufficient, but there were better ones out there with better usability.

They started using a different tether, then switched to the daisy-chain type of tethers. A few months ago, Scott at Liberty tried to cut through the tether with the knife and it was difficult, so they decided to change tethers. As soon as Scott brought that to her attention, she added it to the agenda. She personally had tried to cut through a tether and found it difficult. It took over 30 seconds to cut through.

When asked if NYONair had ever fully loaded an aircraft and tried to egress the passengers when fully harnessed and tethered, she did not know. She did not know if the CX's had any experience in cutting the tethers.

They had looked at replacing the tethers and knives, and replacements were on order. She said they just wanted to make the whole system easier and way better.

When she first started flying the FlyNYON flights, she was still working for Liberty. Liberty had not yet started flying the FlyNYON flights yet.

She did not know if anyone had attempted an evacuation drill, and she was not involved in one.

She said the pilot tethers the passenger in, and the CX could help with the seat belts, but the pilot checks everything. When asked about the loaders, she said the pilots attached the tethers.

When asked about any slack on the tether for the forward passenger getting near the controls, she said at Liberty, the fuel controls are on the floor said she had experienced that with purse straps and camera straps in the area, and the tethers. Pilots know about the issue and know to protect that area, and it was a known area of concern addressed in the training program. She had never had anything snag on the fuel control lever.

When asked if she ever discussed this with the accident pilot, she said it was in her training presentation.

She said she did not know if the SOPs addressed tether slack for the forward passenger. It was her personal practice to take the extra slack and put it back in the carabiner.

When asked about changes to the harness system, she said they had new harnesses on order. They had 5 new blue FAA approved harnesses. The FAA approved ones were smaller and fit the smaller passengers easier. Pilots could reject a passenger if they had a yellow harness but wanted a blue harness.

She was not aware of any formal risk assessment of the harness system.

When asked if there were other solutions considered for addressing potential conflicts between the restraint system and the aircraft controls, she said it depended on the seat install, but you could route it away from it away from the fuel controls. She could not speak to the specific situation.

It was her personal technique, and she was not sure if there was a specific SOP for consideration of the tethers and the fuel controls.

She did not know if NYONair had SMS or a safety program, she said she did not know and she was not the person to ask and they had a lot of people come onboard, and was not aware of any formal program. They received a safety award last year through a nomination process.

When asked if they had a safety reporting system that employees could fill out, she said no, it was informal until a few months ago before a new system was implemented, but she did not know what it was called. It was mainly geared toward the flight operations.

When asked if they had a safety officer at FlyNYON or NYONair, she said no. When asked who had ultimate responsibility for managing safety at the company, she said she and Brian were responsible for managing safety. She did not know of any pilot concerns about the tether system wrapping around the fuel controls.

They did have some issues with the phone holders and got new ones. They would always check for wear on the phone holders, but personally have not had one fail yet.

The solution for the winter weather operations was for pilots to get heated clothing, hand warmers, and foot warmers. They would also alternate flights so pilots could warm up inside. Pilots were required to self-monitor; it was non-punitive if they decided not to fly. If below 30 degrees, there would be no open-door flights, or they would fly the twin stars and we would briefly slide doors open.

When asked about the reaction to the Liberty safety officer suggestions about the restraint system and cutting tool, she said it was enthusiastic and she was surprised, and was not aware that there was an issue with those. She had flown her mom, friends and family. She was disturbed and got on the solution very quickly. To her knowledge, management was accepting of the change.

When asked to describe the company culture with respect to attitudes toward safety, she said safety was the number one priority over everything at NYONair, even customer service. They took the time to ensure everything was safe.

When asked how significant a hazard she perceived the potential conflict between the forward lanyard and fuel shut off to be, before the accident, she said they knew about it prior to the accident, but flying a helicopter is hazardous, and you need to manage it like any other, so to her it was a manageable hazard.

Brian was the NYONair chief pilot on the part 135 certificate. She was not the 119 chief pilot for NYONair. Lead pilot really had no meaning in the regulation world, it was just something she put on her business card.

She said Pat Day (senior) was the Director of Operation at NYONair. She had seen him in the offices, maybe once a week. She was not aware that he was not on the pilot calls and did not know why he was not involved but he was invited.

Their 135 certificate was for East West, with oversight in Cincinnati. When asked if she knew who the NYONair POI was, she asked what was a POI. After explained to her what a POI was, she said she did not know who it was. She was involved in training, only on the FlyNYON part 91 side, not the part 135 operations.

She said they had an FAA approved training program at NYONair. When asked if there were any FlyNYON procedures included in their FAA approved training program, she said she had never submitted anything personally. When asked where the FlyNYON procedures resided like for the tethering, she said there was a digital SOP manual that was distributed to all relevant parties.

FlyNYON flights were the majority of their flights, but it also depended on the season.

When asked who taught her how to tether the passengers, she said it was Rob Marshal, who was no longer with the company. She was taught when she was a Liberty pilot. The CX's were trained by Moe. She did not know if the pilots ever attended the CX training since she was not there for CX training.

CX's were trained to come out and assist in securing the passengers. She had never taken a passenger ride on a FlyNYON flight, and she had never been harnessed and tethered to see what it would feel like.

FlyNYON pilot training consisted of a power point presentation. Passengers viewed a video briefing.

Liberty developed the SOPs for the FlyNYON flights, and FlyNYON vetted them. They were running a lot of their flights, and needed an SOP for standardization, so the Liberty pilots took on the task.

The part 135 operation was for charters, point a to b, using canned specific routes that departed and returned to the same location. Asked if those flights were conducted under a LOA for part 91, she said she was aware of the LOA but did not have specific information on that and it was in the regulations.

When asked if she had seen the FAA observe their operation, she said the last time was a few months ago when it was cold outside. They were in the hanger and she was in the general area. When asked if she ever had an FAA person on one of her flights, she said not that she was aware of.

She said they had check pilots to conduct observations on NYONair pilots. The observation work would occur on aircraft with dual controls. On the 135 side, pilot records were maintained for currency and training by the chief pilot. She did not maintain the records.

She said she interacted with the Director of Operations personally about once a week. She did not know of any regular meetings specifically with NYONair DO and NYONair pilots, only the pilot safety meeting. Pilots could call the DO; there was an open line of communications. They did just have a meeting with the NYONair pilots in LAS at the Heli Expo.

She said they used NYONair part 135 SOPs for the part 91 flights.

She said she knew the accident pilot socially, but had never flown with him. She said he was a great guy and safe pilot.

She did not know who Air360 was.

She had gone to flight school at Mountain Ridge helicopters in Logan, UT. Aircraft training at NYONair was done by Liberty, she just trained the FlyNYON procedures. Liberty pilots were also checked out in NYONair aircraft which included the B-3's. They received differences training from Brent Duca at Liberty, which included differences between the B-2 and B-3.

FlyNYON did not have an approved briefing card since it was all covered in the safety briefing. Chris at NYONair also did safety training. There were two New York NYONair pilots; herself and Chris.

Passengers received a briefing prior to arrival at the aircraft, and the pilot rebriefed them before flight. There was no standard briefing card, and each pilot could conduct what they deemed to be their safety briefing. She said passengers were shown how to remove the knife. CX's showed that at the terminal and the pilot showed it at the aircraft. When asked if it was physically removed from the harness for the demonstration, she said yes, but she was not sure if that was in the SOPs.

The tether for the front passenger was sometimes under the armrest in the front, and it depended on the size of the passenger. She was not sure if that was in the SOPs. When asked if the forward tether was routed so that it would not hit the control had anything to do with the armrest, she said it could, and for some of the other single seat, there was a hole in the back, but not all the aircraft had armrests on the front seat.

There was no training to blow the floats, and she personally had not done that. Some of their pilots had cold water survival training prior to coming to NYONair.

NYONair aircraft had the fuel controls on the overhead. All Liberty aircraft had the fuel controls on the floor.

Regarding the accident pilot, she did not remember if he expressed any safety concerns.

She knew there was a previous accident involving something catching the fuel control, knew there was a strap issue, but was not really familiar with the details.

When asked if she had anything else to add, she said no.

Interview concluded at 1355.

7.0 Interviewee: Brian Rosenberg, NYONair Chief Pilot

Representative: Stephen Walsh, Condon Forsyth LLP

Date / Time: March 16, 2018 / 1515 EDT

Location: NYONair offices

Present: David Lawrence, Van McKenney, Emily Gibson, Bill Bramble– NTSB; Victor Mevo – FAA; Paul Tramontana – Liberty; Manny Figlia- Airbus; Ethan Fang – NYONair

During the interview, Captain Rosenberg stated the following:

His name was Brian Rosenberg and he was the chief pilot for NYONair. He was in charge of pilots and scheduling and training, and was also responsible for the safety of the aircraft and passengers.

His background included being in the industry for 20 years, and most of his flying had been on the west coast. He trained in Oakland at the Sierra Academy and started doing part 135 operations with Maverick Helicopters for 9 years, always trying to get back to California. He came back to LAS as chief pilot for Stars and Stripes Helicopters for one year, which went out of

business. He then flew for Sundance Helicopters for 4 years, and then NYONair called looking for a chief pilot to get the 135 certificate up and going. He was hired by NYONair in June of 2017. He estimated his total flight time just over 7,000 hours, all rotor time. He had flown a variety of types, including the A-stars, BA, B1, B2 and some B3 time. He had time in the EC-130 and Robinson 22 and 44, and the Schweizer 300 and Bell 206. He held a commercial instrument rotor certificate, and an expired CFI. He also held a second-class medical certificate.

His duties at NYONair included helping out after the company purchased their part 135 certificate. They wanted to operate in LAS and they needed the 135 certificate for charter and Grand Canyon flights. When he initially came on, the certificate was for a single pilot-single, single-seat operator. In August or September they got approved for a full part 135 operation, and then brought in 2 part 91 pilots from the NY operation onto the part 135 certificate. The NYONair pilots in LAS were trained on the 135 side. There were 4 LAS pilots; 2 pilots on the part 135 certificate, and two who were not. They had one aircraft in LAS; a B-3. They had not done many part 135 operations in LAS since the intent was to do the Grand Canyon tours on the part 135 certificate. Currently, most of their flights were the FlyNYON flights. They were currently out of the season and were only flying 3-5 flights a week. In-season flying included about 10-15 flights per week.

When asked how he managed the NYONair pilots in all the other bases as chief pilot, he said putting the system together, he was communicating through Slack, using open communications. He individually set up a lead pilot at each location and they were included in a pilot group call.

When he first came to the company, he said Chris Blanton came to LAS when they brought the aircraft out there and trained him in the aircraft and then on the FlyNYON procedures. He then flew to New York and got additional training on the FlyNYON procedures from Christi.

He said he had done a lot of ENG work and thought the FlyNYON flights involved a combination of what other companies were doing in one experience. He initially he had concerns with the harnesses and tethers, and a variety of topics that were related to the accident. They were discussed, and after the training and seeing how it all worked was a great comfort.

He said the pilot conference calls were basically in place when he got onboard with NYONair, and he did not know when they started. Christi was in charge, and continued scheduling them, and he said he had been on all the calls save for one since. He said it had been an eye-opener in every way. Participation in the calls was mandatory for one person at each location, and they would discuss things like the harnesses, pilot duty times, flying in cold weather, objects falling out, which preventing was their primary objective.

Multiple people brought up different topics, trying to figure out how to make things safer, and there had been many mindful decisions. Suggestions could come from the pilots, management, CX; all depending on the issue. The person whose area it was would be making the decision, and he would direct to Pat, Jillian, or the training officers. Some of the issues were tracked by email. Most of the time people would call him and there would be immediate decisions.

The pilot calls were originally once a week, but then that changed. The calls became more social, and they included topics that were not important, which became a time constraint. If it was an immediate issue, they would have a meeting right away. They were at a point where things were operating smoothly, and they could make the necessary decisions on a two-week basis instead of every week. That decision was made about 4 weeks ago.

When asked the reason behind the Liberty pilots being excluded from the calls, he said there was a decision made that each station would have one representative on the call. Scott would be a rep for the Liberty pilots, and there would be reps from the other locations as well. When pilots were on phone calls together, a lot of issues would come up, some of it was safety oriented and some was not. They wanted to make those calls strictly safety related. That started to happen in the last two meetings.

The only information they put out to notify people of the change was via Slack or email. He could not remember 100% if the information about the meetings was via email. That change to remove Scott from the pilot calls had occurred recently, and he was not a part of the decision to remove him. He did not personally have a plan to replace Scott on the call, but the people who did remove him would be communicating with him.

He had some interaction with the Liberty pilots; mostly operational related from the management side. He had been back to New York four times. The first time was for 135 training. Each time he would come to New York, he trained with Paul and Brent, who would set him up with training for the certificate. He had met some of the other Liberty pilots and got to know their names and faces.

For the pilot calls, the management personnel that attended included Pat, Moe, Huss, Ethan, Jenna as regulars. He said that the NYONair Director of Operations was not involved in the pilot calls.

He believed some Liberty pilots had access to NYONair emails, like Paul and Brent.

Regarding the concerns he had about the harness, it included getting into and out of the harnesses. For the company, the discussion about the safety of the harnesses were if they were FAA approved or not, but they also were not required. He said they had been working on getting the harnesses that were FAA approved.

He said he had flown FlyNYON flights. When asked if the tether lines ever interfered with the fuel controls, he said no, since the NYONair aircraft had the fuel controls on the overhead. He said the potential was there, and they all knew it.

The loaders in LAS were the pilots. The pilot who would not be flying would assist as the loader. They did not have dedicated loaders in LAS, and he and the other pilot were trained by Christi.

When asked to characterize the company's safety culture, he said it had been incredible compared to other operators he had worked for, covering their methods and procedures. He felt

comfortable raising any safety concerns with management. Every time he had a safety concern to bring up, most of them had been immediately processed prior to moving forward.

In LAS, the extra pilot acted as the CX, but that had not happened in a while. When they first started, they had multiple people teach them the CX duties. He received the training, but not through Moe since he came on before Moe. All training he received had been similar to the CX training. With gradually increasing safety concerns, they developed standards. They had a standard, and were trying to make the briefing better and add some things to the standard.

He said he was the chief pilot for NYONair on their part 135 certificate, which was a 119 position. The certificate was held in Cincinnati, and they had just switched it to LAS. The PBO was listed as LAS. Gary Middleton from the Cincinnati FSDO was still the POI. He would communicate with the POI about every 3 weeks. He had never met the POI in person and had never seen him. They had another POI named Michael up until about a month or so ago.

When asked if the FAA had performed any surveillance activities on their New York operations, he said when they were working on their 135 certificate, someone came to New York around August or September but he did not know who, and believed they reviewed manuals. When asked how the FAA would get the manuals, he said all the NYONair manuals were stored digitally.

When they bought the part 135 certificate from East West, the POI stayed on with the certificate as a point of contact.

The NYONair Director of Operations was Pat Day, Sr. When asked who his direct supervisor was, he said Pat Day Jr. and Pat Day Sr. Pat Day Sr.'s name was on the 135 certificate, and he interacted with him about once a month. When asked if the Director of Operations (Pat Day Sr.) was involved in the NYONair operations, he said no, he was not as involved. They were still in the infancy of the 135 certificate they owned, and they were building the manpower to get people in the right positions.

He said he had responsibilities on the part 135 certificate as chief pilot, as did the Director of Operations. When asked why the Director of Operations was not involved in the pilot safety calls, he said he and the NYONair CEO had been trying to get him more involved and vocal on the certificate. They had been talking to him, but he had a different perspective. The operation got real busy quickly. When asked if the Director of Operations's lack of involvement in the operations at NYONair had been a hindrance, he said no, there had been no resistance to getting through to either the CEO and Director of Operations. They did talk to each other back and forth.

When asked if the B-3 had been conformed, he said right now they had the 3 B-3's, which one was a B3E, and 2 355's. They were trying to add another aircraft. On the certificate, they had 5 aircraft. The Cincinnati FSDO did the conformance. They just got the two B-3's in May and September of last year, but he could not recall if the B3E went back to New York. They did not have any B-2's; those were operated by Liberty.

He had not received and pilot reports regarding fuel flow and shutoff lever issues with the tethers.

Prior to NYONair, he had never seen that type of harnessing before and did not think it existed before FlyNYON.

When asked if they had conducted a risk assessment on the harness and tether system, he said yes, and that they collaborated with Liberty in that direction, and that was how the SOP's got developed. They helped since Liberty had the majority of pilots doing that operation. He said he was told Liberty had accomplished a timing for the evacuation and egress, but he was not there but it was discussed at a pilot meeting. There was never a formal risk assessment with a written assessment of severity and probability or any documentation of mitigation strategies.

When asked if NYONair had a safety program for anonymous disclosures of safety issues, he said anyone could go to the company with concerns, but there was not anything formal.

When asked to clarify the egress work done by Liberty, he said he had not been there, and for his part he communicated with Liberty that they would test the possibilities of creating scenarios for what they could do with the harnesses and egress. Most of their early efforts were related on how to keep the passengers inside the aircraft. From the pilot meetings and other discussions, that attention began to focus on how the passengers could get out of the aircraft and how long it would take. When asked if a concern had been brought up at pilot meetings on how to get passengers out of helicopters, he said yes, that had always been a concern of everybody. He could not remember if the discussion was between him and Paul, or raised at a meeting.

He said he and Liberty did have discussions about the knife. He did not recall having a specific conversation with Liberty about a specific test to get passengers out.

When asked if he recalled Pat Day saying Liberty pilots needed to be more dedicated to the FlyNYON brand, he said yes, but that was taken out of context. The context was for NYONair pilots going from a tour mode to that more aligned with the brand of flying they were doing.

He said Scott at Liberty was not removed from the pilot calls for raising any safety concern.

He said flight following was done through Slack text messaging where the pilots would send back their location and fuel. NYONair flights did have spider-tracks capability. When asked as a pilot in an emergency, conducting an auto-rotation, would he think to hit the Spider-tracks Mayday button, he said that was most likely the last thing a pilot would do in an emergency.

He had never had to deploy floats on a helicopter.

Chris Blanton was one of the other NYONair instructors.

When asked if he had any other relevant information to add to the investigation, he said no.

Interview concluded at 1620.

8.0 Interviewee: Patrick Kevin Day, Chief Executive Officer, FlyNYON

Representative: David Harrington, Condon & Forsyth LLP

Date / Time: March 16, 2018 / 1636 EDT

Location: FlyNYON offices

Present: David Lawrence, Van McKenny, Emily Gibson, Bill Bramble– NTSB; Victor Mevo – FAA; Paul Tramontana – Liberty Helicopters; Manny Figlia- Airbus; Brian Rosenberg, Ethan Fang – FlyNYON

During the interview, Mr. Day stated the following:

Asked to describe his duties and responsibilities, he said he was the visionary, the top of the pyramid. He gave directives to 8 people that reported to him. He was the founder.

Asked to describe his background he said he had attended business school at Rutgers University. He had been in the U.S. Army. He had become a line pilot in the 1990s. He had run marketing for Liberty Helicopters in the 2000s. During the period 2009-2010 he began branching out doing his own things. He formed New York On Air in 2012.

His pilot certificates were commercial pilot helicopter and private pilot airplane. He had 5-6,000 flight hours, 95% of which was rotorcraft time. Asked whether he still flew, he said he had stopped flying 3.5 years ago.

Asked how NYONAir started, and for his thoughts about what the company was supposed to do, and what the evolution of it had been, he said that when Hurricane Sandy hit, he had donated a helicopter to assist first responders with getting out to the Jersey Shore. He spent 3-4 weeks with the doors off, taking pics up and down the coastline and shared many of them with first responders and homeowners. That was how he got the inspiration to get into the business. He mostly did production work in the beginning, including some SAG work. Had a gimbal and took aerial photos.

Mr. Day stated that he had been flying over New York City his whole life. He was coming in one evening from Jersey Shore it was just after sunset and he saw the city and thought wow if it was still inspiring him after all this time, there must be some magic there. He formed NYON and did production work and photos. He took an angel round of funding and gave it away to photographers and content contributors to get perspectives from different eyes to create content and build a following on social media. A lot of clients started writing in and saying it looked like fun, and asked how they could do it themselves. Mr. Day started FlyNYON in November 2014, 2 years after he had started NYONAir. It was clear early on that it was a popular product the public wanted.

Asked what made it different than going on a standard air tour, he said he was a customer guy, and he wanted everybody to get their money's worth for the same experience. He thought that the people in the two middle seats in the back of the helicopter did not get their money's worth on a standard tour. That led to the evolution of what NYON was today. He had spent time talking to specialists in the industry, reading the regulation about what they could and could not do, and that was how the brand was started.

Asked how the company had developed its passenger harnessing system, he said Rob Marshall, their production pilot, and Tim Orr his SAG partner for 25 years and some PD guys in the area had developed it. They had recruited various others to test out different systems. Some operators in Vegas, Hawaii, and elsewhere were giving these tours also, and it was a concern of his early on that someone might unbuckle and fall out of the helicopter. Asked whether these people had given him recommendations on what to do, he said yes. Rob had come up with the harnessing system. They were all pilots and knew something about the regulations, so the three of them had come up with it.

Asked how they had approached the design of the harness system, he said the goal was to develop a harness system that had three places to secure someone on the body that would hold them into the helicopter. It ended up being a harness that men used when working on the side of a building a thousand feet up. The harness was constructed for that. It was the yellow harness.

Asked about the tether, he said the original design was probably a recommendation of Rob Marshall, who was very familiar with production and SAG work and had flown out the side of a helicopter for over 40 years.

Asked how they made the decision about how to anchor the tethers to the aircraft, he said it was trial and error with people sitting in helicopters, figuring out best spots to locate the anchors. Rob Marshall had taken the lead because of his background and experience.

Asked when they flew their first load of paying customers, he said November 2014.

Asked what kind of testing of the system they had done before that, he said they had conducted a series of tests at the heliport. They had placed pilots and ramp agents in the helicopter and practiced exiting the aircraft in event of an emergency. There was redundancy to that. It was a series of tests led by Mr. Marshall. Asked whether the tests were documented he said Rob might have documented it at the time. He could not recall. Asked whether his company currently had any documentation of the testing he said no.

Asked whether pilots started having safety meetings, he said yes, the meetings were his idea, a dozen pilots could tell you that. He had started the meetings and the minutes. Christine Brown was FlyNYON's first paid pilot. The previous two years everyone had been contributing sweat equity. Christine was also a skydiver and had experience with different things. He made her base manager and safety officer, he guessed one would say. She was briefing the customer experience (CX) people and future pilots. She would spend an afternoon with new pilots that came on. She was hired in January 2015.

Mr. Day was asked when he decided they needed more helicopters. He said the level of business growth determined it. When they started to run out of assets the sunset flight became popular. Tail numbers 5MH and SC were the original FlyNYON helicopters – they were Twinstars. Asked how they decided on an operator with which to partner, he said his mechanic Mike Renz also had a 135 certificate for a company called Analar and he had brought up an AStar from Texas. Asked how many helicopters they had at that point, he said the two FlyNYON

helicopters plus Renz's A-Star. Renz also provided a pilot for his equipment. The company began using Renz's helicopter in late spring 2016.

After that, FlyNYON expanded to using Liberty Helicopters. Asked why they selected Liberty, Mr. Day said they had a very similar fleet to the A-star. Their pilots had similar training. Paul and Brent were probably the top guys in the industry for training A-star pilots. FlyNYON did not want to pay ferry costs and Liberty was located in the same hangar. That relationship had begun in July or August 2017. They had a 12-month hourly agreement between the companies. It was signed in late September or early October 2017.

Asked whether FlyNYON was still using Mike Renz's helicopter, Mr. Day said no. Mr. Renz had a higher rate. Liberty charged \$1,200 per hour and Renze charged \$1,700 per hour, so they had started working with Liberty. Asked how it went integrating Liberty in FlyNYON operations, Mr. Day said he realized the Liberty chief pilot Paul Tramontana had a strong staff. Some of the guys were opinionated. Mr. Day realized that they needed to have a pilot meeting every Sunday, a weekly safety meeting, so that any problems arising or communication breakdowns could be addressed. Mr. Day got things going, attended the first two to three meetings, and then handed the meetings off to Christine Brown to run. After that he would review the minutes.

Asked who was intended to be involved in the meetings, he said originally it was all the Liberty pilots, 20-25 pilots. FlyNYON had 6-8 pilots, so there were probably 30 people on the phone. The head of CX, other managers, Mr. Day, Brent Duca from Liberty, and eventually Brent was replaced by Scott Fabia.

Mr. Day was asked whether any safety issues were brought up in the meetings. He said he would not call them issues because as part of the development of anything they would get recommendations and there was always a wide array of opinions. Any recommendations that made it to his desk, his tagline was if that was what they wanted and it improved the safety of the passengers, spend the money and get it. He said that was a term he used a lot. Asked how these issues would get to his desk, he said via the minutes or most recently through his communications with Christi.

Asked for examples of actions taken as a result of such information, he said that he was not involved, he was more involved in making sure they had the necessary funds. Christi had been his point person in recent times – the hired professional with the background needed to make those decisions for them. Asked what he would do if she wanted to do something that required expenditure, he said he would tell her, "Buy it. Get it."

Asked to clarify whether he was only involved in an action that required expenditure, he said he was involved the first year, but after he hired the west coast base manager Brian Rosenberg and east coast base manager Christine Brown, they were base managers and also the safety officers for the company. Asked whether they were responsible for monitoring the calls, he said yes, and they were on all the pilot calls.

Mr. Day was asked whether Mr. Scott Fabia, the POC for the Liberty pilots on the pilot meetings had recently been removed from the attendee list. He replied yes, Mr. Fabia and the FlyNYON CX manager, Moe, had had some run-ins. Their personalities did not jive, like oil and water. Mr. Fabia was an intense young man who was a little more serious than average. Mr. Day said he did not like to use the term hot in the head, but Mr. Fabia was excitable, and Mr. Day had recently heard two or three stories relating to that. They had not removed him or anything. Mr. Fabia had only recently taken over as safety officer from Brent Duca. So Mr. Fabia had been on their most recent pilot meeting call before the accident.

That call was the first pilot meeting call Mr. Day had participated in since returning from the Helicopter Association International Meeting where FlyNYON was starting to hire new pilots for the upcoming season and Mr. Day mentioned that they were going to be hiring pilots that were NYON brand-friendly. Growing up as a third-generation aviator, he knew that different pilots enjoyed doing different types of flights. Some Liberty pilots were not conducive to the aerial photography flights. They preferred more point A to point B and FlyNYON was more experiential. So Mr. Day had mentioned that they were going to hire more NYON-friendly pilots because it required more special attention to customers before and after the flight.

After the meeting, Mr. Fabia wrote Mr. Day a scathing private message, so Mr. Day reached out to his father, Patrick Day, and said that he would no longer be needing Mr. Fabia's services for NYONAir. That happened during the last week. Asked how FlyNYON was going to proceed, what was the plan to continue the dialog and who was replacing Scott. Mr. Day said that it just happened and was under review.

Asked to expand on the hiring NYON was doing, he said hiring of pilots had been ongoing for the last three weeks. Brian Rosenberg and Christine Brown had been involved in that.

Asked why he thought Mr. Fabia had taken offense to his comment, he said Mr. Fabia just took offense to certain things. Mr. Day was surprised that Mr. Fabia had sent the message. Asked whether removing Mr. Fabia from the pilot meetings had anything to do with Mr. Fabia raising safety issues, he said "Zero." He was a strong safety advocate and not getting into their space.

Mr. Day was asked how the daisy chain-style restraint was selected, Mr. Day said he did not recall. Rob Marshall had been in charge of developing the first version and he thought the daisy chain was the second version. Asked whether his company had contracted with any safety consultants to examine potential risks associated with the harnessing system, Mr. Day said no. They had just relied on pilots who had been around production work and had had people hanging out helicopters and worked around that type of equipment for many decades, so there was never any thought to go to outside people.

Mr. Day was informed that his father, Patrick Day had mentioned something about FlyNYON using safety consultants. He responded that since the accident FlyNYON had been exploring bringing in a company from Canada to review the harnessing system.

Asked whether his company had ever conducted a test involving having a full load of harnessed passengers getting out of a helicopter in a hurry using the safety knives, he said he had heard from his pilot Brian Rosenberg that Brent Duca performed an egress test at the Kearny Heliport.

Asked if he had been aware of any pilot concerns involving the restraint system prior to the accident, he said he was not aware of anything that was “stop, shut down”, only that there was other equipment out there that they could consider using.

Asked whether he was familiar with safety management systems, he said somewhat. Asked whether there had been any discussion prior to the accident about developing a safety management system for the company, he said Brian Rosenberg and Christine Brown and Brent were working on something to kind of standardize everything they were doing. Asked what he had in mind for the company’s safety efforts going forward, he said they were bringing in an outside consultant to inspect their process before they turned a rotor. It was a Canadian company that fielded systems for emergency medical services operators, original equipment manufacturers, and firefighting operators using helicopters. FlyNYON was going to do that before they did anything. Asked for the name of the company, he said he could not recall the name of the company but he would get it.

Mr. Day was asked to respond to statements that had been made in other interviews. He was asked whether he had ever told someone at Liberty that there was no problem with the harnesses, and pilots were not allowed to ask for the blue harnesses, that harnesses were essentially a bonus, they were not required and the passengers did not need to wear them. He responded no, there was an issue where some pilots thought the regulations specified that they had to have FAA-certified harnesses. They explained that it was not in the regulations, and if it was, please show it. FlyNYON had purchased the blue harnesses for one reason. In one of his weekend studies, Brent had taken FlyNYON harnesses over to the hangar and Mr. Day was shown a video of a 106 lb girl hanging in it and it was very loose. The blue harness had more adjustments, so that was why they had ordered them. They happened to be FAA certified as well. The pilots had already identified the blue harness when he was shown the video. Asked whether the pilots could send a passenger back if they felt a yellow harness was too loose, Mr. Day said yes, always.

Asked whether he had put pressure on Liberty pilots to fly when it was cold and they said they were concerned they would lose feeling in their hands, telling them they should not turn down a flight, that they needed the money, he said the first winter FlyNYON flew, he had flown the helicopters himself from December through February. There had been discussions since about temperatures, but different pilots had different abilities to operate in different temperatures, so it was tough to standardize to one minimum temperature. What they did agree to was that below 35 degrees they would not do 30-minute flights and no pilot would do back-to-back flights. There would be enough pilots to alternate flights on those days. There was no pressure from Mr. Day to do flights in the cold.

Asked about the status of ordering new harness material, he said that was in process. FlyNYON had gotten the links the Friday before the accident and they were ordering the new recommended gear.

Mr. Day was asked whether he had flown commercially. He said he had been a Part 135 captain on the AS350 and AS355. He had taken his first checkride for that in 1997 or 1998.

Asked if he was familiar with risk assessment, he said yes. Asked what he thought it was, he said it meant that for any mission one could determine what level of risk it was. He knew that was big in the EMS world. Asked whether he had considered using some of the risk assessment templates that were used in the EMS world at FlyNYON he said yes, any time his safety officers came to him and wanted him to do something, they supported it 110%. Asked whether a formal risk assessment had ever been done for the harness system, he said not a formal one, no. Asked if they had done an informal one, he said he would have to defer to Brian. He did not know 100%.

Asked where the concept of securing the passengers to helicopter had come from, he said it had arisen from a concern about the passengers becoming overly excited about taking a picture and somehow falling out of a helicopter without a door. Asked why they had passengers sit with their legs hanging out the doorway if they had that concern, he said they allowed it because the passengers were in a safety harness attached to the helicopter.

Asked whether, when he had done SAG work in the past, he had ever had five photographers harnessed in the helicopter at the same time, he said no. The most he had had was maybe two or three. Asked whether during those flights he had ever had four people in the back all tethered in, he said no. Asked whether FlyNYON was the first time he had ever done that, he said yes. Asked whether any other operators were doing these types of doors off flights, he said a Grand Canyon operator and an operator in Hawaii on Maui were doing it. Asked whether they also tethered in passengers, he said no, they only used seatbelts. Asked whether FlyNYON was the first company to develop the concept of the tethers and the shoe selfies, he said yes.

Mr. Day was asked whether he discussed with any other industry people the concept of the doors open flights prior to initiating them. He said Kearny Heliport was a melting pot of companies coming in and leaving. Other pilots and professionals were consulted during the development. Rob Marshall was the production guy and he did most of the development.

Asked whether they had a formal safety structure at FlyNYON, he said they did not. Asked whether they had gotten any pushback from the helicopter industry since starting the doors-open flights, he said no, except for competitors being concerned about loss of business in the Las Vegas area.

Asked why they had selected Liberty as a partner, he said they operated similar aircraft, their pilots were well trained, and they were located at same base with no ferry cost. Asked whether he was familiar with Liberty before that, he said yes. Asked whether he held any position there he said no. Informed that the Liberty web site showed him as the director of marketing, he said that he was in the position until 2012. He knew it still said that on the web site, he needed to get himself removed.

Asked why the DO for NYONAir was listed as Patrick Day, he said that was his father, Patrick Michael Day. Asked whether Patrick Michael Day was a Part 119 manager for the East West 135 certificate and for the Liberty 135 certificate, he said that was correct. He was serving in both

positions at the same time. Asked how often Patrick Michael Day came over to the NYONAir offices, he said probably once a week, but he was always reachable.

Mr. Day was asked what percentage of NYONAir flights were Part 135 operations, and he said probably about 30%. Asked if they conducted Part 135 flights daily he said no.

Asked whether the fact that Patrick Michael Day held positions on two certificates simultaneously posed a challenge to NYONAir's Part 135 operations, he said no. Asked why not, he said all our questions and concerns were answered. He was very reachable. He worked with Brian and Christine when they need advice or guidance.

Asked whether he had ever met the POI, he said he had met him briefly in September when the PMI visited to perform conforming inspections on the aircraft and the POI came to check out their operation. Asked whether the POI had observed one of the FlyNYON flights, he said he knew that the POI had toured the hangar. He did not know if he had gone on a flight.

NYONAir's Part 135 certificate was held in Cincinnati, Ohio. Asked whether there were any plans to move the certificate to Las Vegas, he said no, Cincinnati was a good location for a brand on both coasts. Asked for the location of the PBO on that certificate, he said he did not know. Asked whether NYONAir had any operations in Cincinnati, he said no.

Asked whether there was any formal letter assigning Christine Brown to the position of safety officer he said no. Asked whether she was aware that she had been assigned those duties he said yes. Asked who gave her those instructions, he said he had.

Asked whether he had flown FlyNYON flights, he said yes, he did so the first winter they operated. Asked if he had ever ridden as passenger, he said he had ridden as passenger in the same harness. Asked for his thoughts when he was strapped in the harness, he said never once did he feel he could not get himself or his children (who were 12 and 16) out of that harness. Asked whether he had any concern about his 12 year old getting out of the harness in an emergency he said no.

Asked whether he had ever deployed the floats on the helicopter, he said no. He had witnessed it twice before in his career and both times the helicopter had landed on the water and remained upright.

Mr. Day was asked whether he ever had problems with excess lengths of tether in the area of the controls. He said on all the tours he had done since the 1970s that quadrant was exposed. They only had one person up front, whereas tour operators in city had a person in the front middle seat right over that quadrant. As a pilot there was always a concern with putting a guard over that.

Asked why FlyNYON was considering a new tether, he said he was told about a month before the accident that it was difficult to cut through. They were ordering new knives and tethers. Scott and the others were handling that. Mr. Day was never informed that you would not be able to cut yourself out.

Asked whether he had tried to do it himself, he said yes. The tether with the single strap was not hard, the double was more difficult, but with adrenaline and weight on it, it was his opinion that someone would be able to cut it, and there were other areas that one would be able to cut around the rings. Asked if there were different tethers, he said there was the one with the loops and the one with the tether and the fishtail. Asked if he meant the back and the front tethers, he said yes.

Mr. Day was asked who developed the FlyNYON safety video, he said Kai Simonson. He as a reporter who flew out of Linden Airport. He had made videos for all the helicopter operators. Asked if he was aware that the life jacket shown in the video was different from the vest used by FlyNYON passengers, he said yes. Asked whose idea it was to put the vests on the passengers, he said originally they were in the chin bubble and he believed it had been Brent's idea to put them on.

Asked whether FlyNYON passengers had been compliant with instructions when he had taken them up he said yes. Asked if the company had performed security screening on them, he said yes, they used metal wands as well. Asked if they had ever had passengers come in that had been drinking, he said no. If there was any sign of that they were dismissed from the facility.

Asked if FlyNYON provided guidance to their passengers to dress warmly, he said yes. They were informed in the company web Q&A. Asked if the company had extra clothes for them, he said they had extra gear and his standing order was to give them sweatshirts or whatever if they were not properly protected.

Mr. Day was asked how passengers would report concerns if they had any, he said they were not shy about giving their thoughts on Facebook or Google Reviews, and FlyNYON sent them a form after the flight and asked them to grade their experience with the pilots, CX personnel, and booking – the whole experience. Asked if FlyNYON had someone monitoring social media sites for passenger comments, he said yes, their social media manager Kevin Cortes. That was his number one priority.

Asked if he was aware of any passengers that were sent back from the helicopter for needing a new harness, he said he believed that had happened. Asked whether there was any punitive action taken with the respect to the pilot he said "Never."

Asked how he was informed about the accident, he said they were pushing back at Newark for Florida and a FlyNYON dispatcher called him and told him that they had an aircraft in the water. He went back to the flight attendant and asked if the wifi was going to work and the captain went into rocket ship mode and got him up to 30,000 feet above DC to use the wifi. He got connected to the wifi and the thought based on his past experience that he was going to hear that they had an upright aircraft. Once he heard otherwise, it was an awful experience. His two sons were next to him and it went from a fun quick trip for their spring break to as soon as they landed they booked the next trip back to New Jersey and landed at 0850.

Asked whether FlyNYON had an emergency response plan or relied on Liberty's, he said that Liberty had a very strong one and a lot of what Liberty did FlyNYON followed.

Asked whether FlyNYON ever had any third-party safety audits by organizations like Tour Operators Program of Safety (TOPS), he said no. Asked whether the company was considering doing that he said yes. Asked whether they were considering arranging safety audits by any organizations other than the Canadian equipment company, he said yes.

TOPS did not do the doors off flights, but anything he could do to improve the company's safety oversight they would improve on that.

Asked whether he knew the accident pilot, he said he knew him as a nice young man. He had said hi to him at the heliport from time to time. He did not think he ever flew with him.

Asked to explain his company's dba's, he said the parent company was NYONAir. The two verticals were FlyNYON, the experience brand, and Foxtrot, the Part 135 A to B charter brand. Foxtrot was a new brand they were launching in the next month. A previous company was Grasshopper. It was a broker and not an operator. They had gotten rid of that one. Asked where East West fit in, he said it was a subsidiary of NYONAir. It had been 1-1 certificate. NYONAir had purchased it in January 2017 and Mr. Day's father had helped him develop it to a full unlimited certificate. Foxtrot was a dba for East West.

Air360 was an outside operator run by a gentleman named Andre in Los Angeles. Mr. Day could not remember Andre's last name. They shared 135 pilots. Lauren was a pilot on both certificates. Asked whether Air360 was doing photo missions, he said they had been but they were not doing them anymore.

Asked if that was the whole NYONAir organization as far as dbas, he said yes.

Mr. Day was asked what a Liberty pilot would do if a customer came out and the pilot just did not think the harness fit right. He said the pilot would notify the CX and tell him to take the passenger back to the rigger shed and get him a proper harness. Asked whether the CX would take the whole group back, he said he did not know. Asked whether the pilot would notify anybody else in FlyNYON, he said he did not know. He assumed the pilot would notify his chain of command and dispatch. After the passengers got inside the perimeter of the Kearny Heliport they were Liberty's passengers. Asked whether he would hear about such an event, he said only if there was an issue between the pilot and one of his managers.

Asked to confirm that he had informally designated Christine and Brian as safety officers, he said yes. Asked whether they were provided any training for that position, he said he believed they had gone to some classes at the HAI meeting. He was always looking to educate his groups whether they were in the flight or accounting department. He did not believe training had been requested. They might have received some training, but he did not know. Asked whether Brian and Christine were just doing the best they could, he said yes. They had a lot of knowledge and experience flying in the business for years and they were confident professionals.

Mr. Day was asked how many customers had had the FlyNYON experience in the past year and he said about 11,000 to 12,000. Asked if he was ever concerned about the company growing too quickly, he said no, not when it came to the flight department. He knew he had strong people

around the flight department and he never felt the operation was at risk because of their growth. Asked how many of those passengers were flown in New York, he said 80%.

Asked how FlyNYON should be described as a company in NTSB reports, he said it was an experience media brand that flies its flights under Part 91. NYONAir was the parent, but the brand that sells is FlyNYON. The brand they marketed the Part 135 company under was Foxtrot. They wanted to let customers know exactly what each service represented. Booking was done through their website, not an app. Hangar 95 was a production company Mr. Day had sold in January.

Mr. Day clarified that FlyNYON would not do another doors-off experience until they had had an independent consultant come in and tell them what type of equipment they should be using. Asked whether there was anything else investigators had not asked him about that he would like to share that might be relevant to the investigation, he said no, he thought everything had been covered. He said he had prided himself on doing everything top shelf, and this had been a painful experience. When you take your own kids up and put them in situations like that it was very painful.

The interview concluded at 1755.

9.0 Interviewee: Ethan Fang, NYONair Director of Business Operations

Representative: Stephen Walsh, Condon Forsyth LLP

Date / Time: March 16, 2018 / 1809 EDT

Location: NYONair offices

Present: David Lawrence, Van McKenny, Emily Gibson, Bill Bramble– NTSB; Victor Mevo – FAA; Paul Tramontana – Liberty; Manny Figlia- Airbus; Brian Rosenberg, – NYON Air

During the interview, Mr. Fang stated the following:

His title was Director of Business Operations for NYONair. His duties included people, processing, general guidance, sales, and customer service.

He stated his background as a degree in finance and a minor in math from New York University, School of Business. Prior to joining NYONair he was a Blade charter employee for 2.5 years where he became involved with aviation.

He started at NYONair in October 2017. He had no aviation experience and did not hold a pilot certificate. He oversaw approximately 10-15 persons in multiple departments.

When asked over which departments he had oversight. He said scheduling operations, product development software, providing guidance, sales and the customer service experience.

When asked where he worked, he said he floated a lot; he did not have a desk or home base. He could be working in the operations center, the content room and sometimes he worked in the analytics room.

When asked about scheduling, he said he was a frontline supervisor. If the pilots had a problem with one of the passengers, for example a broken cell phone case or loose fitting harness, every flight had a liaison also known as a CX. They would be there on the ground to assist with any issues. If they needed a new harness, the CX would return to terminal and get what was needed. Operations was then notified of any delays.

When asked if this would happen frequently, he said not frequently, it depended if a cell phone cover had a crack, and they would notify him. However if there was a delay and the flight would miss a sunset, the customer may want a refund. In that case, they would come to him. That would be considered a significant impact on customer service.

When asked if NYON had an Emergency Action Plan, he said not that he knew of. They would defer to the pilots in that scenario.

When asked in the event of an emergency what would the operations room responsibility be, he said to relay it to the appropriate people and defer it to them. This would go direct to Pat Day and if he was not available it would go to Jill.

When asked how it played out on the day of the accident, he said he was not physically present. He received a phone call from the social media manager Kevin Cortes, who was notified by the part time content person, Mr. Jason Puma. Mr. Puma reported to Kevin Cortes and he was advised by Kevin Cortes that OLH was in the river and that he should get involved by making notifications. He said he then called Pat Day and notified him.

When asked if he was able to reach Mr. Day, he said yes right before Mr. Day was scheduled to depart on a flight to Florida. He was advised by Mr. Day to make a copy of the flight sheet, take a picture of it, and send it to him and keep him posted. He said he fell into a stressed black hole, did not remember the details, but it was a mad-dash for information. When asked if he was told to interface with Liberty, he said no.

When asked about his responsibilities, he said the Director of Operations ensured that people were happy and motivated to do the best they could.

When asked about the process and logistics, he said it was a business sense of things, when pursuing a deal or partnership who should come into the conversation. The logistical end was to coordinate the CX and pilots to make a seamless harmonized experience.

When asked if he oversaw scheduling, he said yes, as well as the people who worked in the control center and operation center. He said his position was created as the company began to scale.

When asked what were his duties at Blade, he said he was the head of operations, controlled flight scheduling and had the customer service team report to him. He also stated he reported directly to the chairman of the company.

When asked if there were any scheduling conflicts between pilots and Customer Representatives, he said he heard different scenarios with particular conflicts. Certain reactions that may have occurred in front of passengers that were brought to his attention because they had to make customer service gestures to fix the situation. On occasion, they had miscommunication. It was a cold day, so the pilot advised that he wanted to have a certain amount of time to warm up inside and not bring out the group until a certain time. The group wanted to get out early to get a few photos of the helicopter. Operations did not relay this to the pilot that the group was coming out early and the pilot did not need to come out right away. When the pilot saw the group pull up, he reacted by calling operations and bombarding them with a very strong reaction in front of the passengers. The passengers noticed, and were kind enough not to make any comments, but the Customer Representative raised it to him that it happened, and it caused a bit of tension when you see someone react that strong. Subsequently they had to refund the flight.

When asked about a pattern of disagreements due to age and generation, he said he did not know it was due to that, but he did see a pattern developing. He stated the pattern started about two months ago. When asked if there was an impact on the safety of flight operations, he said operationally there was not a significant impact, but from a morale standpoint, it was difficult because they placed an extreme focus on customer service and he did not want customers to leave with a dark color. He also stated it is demoralizing when you get a bad review due to things that are out of your control.

When asked if there was a decision to move more toward NYONair pilots rather than Liberty Pilots he said he believed there was a push to use NYONair pilots to avoid conflict.

When asked if Liberty Pilot Scott Fabia was problematic in that area, he said yes. He was asked if this conflict had any impact on safety of flight operations and he said no.

When asked what was down in the terminal area he said the front desk staffed by the customer representative manager, and the lounge area seating for before and after flights. The operations center was where scheduling occurred for all locations.

When asked if 135 operations were scheduled from the operations center and he said yes. In their operations center were the same people who were controlling the FlyNYON part 91 and NYONair part 135 flights. They were not CX's, but hired specifically for that job. He was not sure if they are licensed dispatchers.

He was asked to clarify the age and generation statement made earlier. He responded by saying the CX employees were much younger than the pilots. When asked if that was why the NYONair brand pilots were thought to be a better fit, he said that may have contributed to the decision. When asked if he meant a more hipster type pilot, he said he would not describe it like that, but rather someone who appreciated the care we take in creating the customer experience. He also stated that the issue did not exist.

When asked what the procedure was regarding a problem with flight equipment, to include harnesses or camera cases, he said if the solution to the issue was not readily available in the

transport van, the Customer Representative would return to the terminal and return with the proper equipment.

When asked who the CX manager was, he said Moe Elmaksoud.

When asked if he was the first person to reach out to Pat Day after the accident, he said he was not sure if he was the first to reach him. He stated he was not aware of the severity, only that the aircraft was in the water.

When asked if he was present during the conflict between the CX and Liberty Pilot Scott Fabia, he said he was not there. He was made aware of it later because it was a sunrise flight and required a customer service gesture.

When asked whether any of the passengers complained about the weather being too cold, he said some have complained but they still thought it was amazing. Others did mention that they would return when the weather was warmer.

When asked what his take on the company's culture concerning safety, he said number one concern. All the folks who were involved on the flight operations side; Christi and Brian, were regularly discussing those topics.

Kevin Cortes was the Social Media Manager.

On the day of the accident, he believed Jason Puma was on the ramp, and Jason was hearing things from other pilots. He was not sure when the operations office was notified. Tyler was at operations that day and went straight to Pat Day.

When asked if the operations center tracked the flights or just landings and takeoff, he was not sure. He was asked if the company used Spider Track, and he said yes.

He was asked to explain how the Operations Center works, he said they had a booking system that aggregated tickets from the web site to time slots, created a flight, assigned it to their roster; it also assigned a pilot. The operations team created that schedule then relayed it to the relevant parties, made changes as necessary, while following up via Slack messaging communications. Slack communications had become a popular method for business communications.

When asked how flight following was conducted he said there was a flight following group on Slack, and operations personnel and pilots would post time, origins of flights and passengers, and then say "lifting." Operations personnel would confirm it via Slack communications and the pilot would post it again once he touched down. Most of the time there was a desk manned in the operation center.

When asked about the purpose of the operation stations, he said the stations could be expanded depending on how busy the season was.

Interview concluded at 1854.

10.0 Interviewee: Christopher Marshall, Line Pilot, Liberty Helicopter Pilot

Representative: Paul Lange, Law Offices of Paul Lange, LLC

Date / Time: March 28, 2018 / 0814 EDT

Location: Liberty Helicopter Offices

Present: Van McKenny, David Lawrence, Bill Bramble, Emily Gibson – NTSB; Bob Hendrickson – FAA; Paul Tramontana – Liberty Helicopters; Brian Rosenberg – NYON Air

During the interview, Mr. Marshall stated the following:

He began contract work with NYON in April of 2017. He was still working full time with Liberty but worked under a 1099 as a contractor for NYON on an as-needed basis. He stated when he worked for NYON on an unscheduled basis, he would send an invoice and they would pay him individually for each flight he had conducted. Mr. Marshall estimated flying 100-150 FlyNYON flights and was flying the day the accident occurred.

When asked to discuss the training he had received to conduct FlyNYON flights he stated the only additional training that was required was to become familiar with the different type of operation which was passengers wearing harnesses that had to be tethered a certain way and that loading was being conducted safely before take-off. He stated he was trained by Christi Brown in April of 2017. A safety video was viewed, and Christi physically went over the positions of the tethers that would be connected, how they worked, and how they attached to the harnesses. He stated they also put the harnesses on to see how they were properly fitted. She followed up with literature that described the SOP for how to load passengers. He was not aware of any kind of recurrent training for NYON flights and stated this was the first time he had ever conducted any kind of flying with passengers secured to a tether inside a helicopter.

When asked to discuss the SOPs used for the FlyNYON flights, Mr. Marshall stated he was not a part of the development and was not aware that they had changed since he began using them. When asked if he was ever evaluated on his conduct of the SOPs or if anyone ever observed him he said he was never given a check ride on how he loaded the passengers. He was never evaluated on how he conducted FlyNYON operations and no one looked or gave a sign off. He believed the SOPs were adequate. He stated that the SOPs were more than adequate for the purpose; using the harnesses and tethers that kept the passengers safe and inside the aircraft during the operation.

When asked about the SOP for how passengers should be tethered to the helicopter, Mr. Marshall stated the literature he had said the CX personnel would be the ones to initially attach the passenger to the tether and then the helicopter. He said it was then the pilot's responsibility to go around and check that all the passengers were harnessed and doublechecked, and verify that everyone had been secured in the aircraft. When asked if the CX was responsible for attaching the tether to the helicopter, he said, initially, but it was a team effort. The CX would help, but the pilot ultimately was responsible for ensuring everything was done and it was two sets of hands to

ensure everything was done properly. He also said it depended on the situation if they allowed the loader or CX to do the actual tethering of the passengers to aircraft. He stated if the loader was busy he would do the entire process himself. He said most recently it was the loader, a guy from Liberty's downtown operation. He was very good, very thorough. But before Mr. Marshall took off he would ensure everyone's harness was attached properly and he was trained to do this under the same initial training and literature.

When asked if the front-seat passenger's tether was supposed to be routed a particular way relative to the armrest he stated it depended on the aircraft, because there could be different obstructions for the tether. He said he would always situate the tether with the least amount of obstructions. If the armrest was present, he would route it underneath for the most direct point from the hard point to the harness. He said that was the only difference from the back seat. He said aircraft 01L had an armrest as well as aircraft RU. Aircraft CK had a double bench seat in front, so he brought the tether between the pilot seat and the bench seat and wrapped it around. The accident aircraft, 0L, had the same armrest. He stated there was room underneath for the tether to go and that was how he would route it instead of going over the armrest. He stated it was the pilot's discretion how to route and as far as he knew there was no specific procedure and was not told to route the tether a specific way on any aircraft. He also stated he did not recall being told to secure excess length of the front tether, but he would loop it through the carabiner to keep it up away from the floor.

When asked if he had ever seen the tethers or any other restraint materials near or conflicting with the helicopter controls during a FlyNYON flight, he stated he would not say it was often but there were occurrences where the tether was in the general vicinity, and the need to be aware of the possibility of that happening was there. He stated he would act to ensure it did not happen by looking down, checking, and noticing if the tether was there and, if so, he got it out of there. He could think of 2 or 3 times he had to reach down and pull it away. He did not regard the potential for conflict between the passenger restraints and aircraft controls to be a concern. He said it was always a possibility and one needed to be aware of it and take care of it when it happened and there were other instances where things may have gotten down into that area regardless of the type of operation of the helicopter, so it was constantly something he was aware of. He did not report it to anyone, but it was something the pilots would have occasionally brought up to talk about. It was a relatively common occurrence, something that happened no matter the type of operation as the controls were right in the middle. He could not say if it was more or less often for FlyNYON flights than air charter flights.

When asked if he had ever had a front passenger's seatbelt straps come undone during a FlyNYON flight he stated he did not want to say it was common but there were a couple of occurrences when passengers would swing their legs out of the helicopter and the buckle would come undone, but he could hear the buckle come undone and he would make sure the passenger refastened their seatbelt. He said when the passenger rotated to the left they could brush the buckle with their arm and it could come undone. He did not personally report it to anyone and the passenger was able to re-buckle, as most times it was the male end that would be through the shoulder harness and the passenger would just have to reattach.

When asked if he had ever been trained on passenger egress for FlyNYON flights, he stated the training was more based on the pilot himself getting out and as far as training to get the passengers out there was nothing specific. When asked what the procedure would be for evacuating passengers in an emergency on FlyNYON flights, he stated in the event of a water landing with an inverted helicopter, it would come down to the passenger following the briefing they had received and being able to release themselves. He stated he personally briefed his passengers on what to do if it became necessary to evacuate the helicopter in an emergency. The process he followed and developed was individually briefing each of the passenger as they put on their life vest. He stated would try and not make it sound grievous, but he would ask if they knew how to use the life vest and said most did not. He would show them the location of the survival knife, the seatbelt cutting knife. He told them they would need to cut their harness if they needed to exit the aircraft quickly. He did not pull out the knife and show it, but he made sure it was accessible to them and they knew its location.

He did not have a safety-related concern about the ability of passengers to evacuate the helicopter in an emergency. He said he tried to tell them and brief them as much as he could and hoped they would be okay.

When asked if there was a standardized briefing pilots were required to give the passengers, he said other than the regular passenger briefing straight out of the passenger FAR that that would be the standard. The seatbelt, emergency exit location, equipment, and so forth.

He stated he was trained on the floats on the skids and how to use them. A few of the pilots had the opportunity to fire the floats when they timed out. He was there for three of those occurrences but did not get to fire them personally. He said was also trained in initial ground training; the speed, altitude, and how to do it in the different ships which had different firing mechanisms. He said there was recurrent training every year and he had never had to physically blow the floats and land on water before. He said if he had to land with the floats he expected the drag would increase with the floats deployed and that the chief pilot had explained the way to end the autorotation: zero out as much as possible and come straight down onto the water to keep the tail rotor out. He expected the floats would keep the aircraft on the water long enough to get out of the aircraft before it sank. He said he could not see why he would not have at least a few hours to do that if they were working properly. He was not aware of any problems with the float system.

When asked if emergency landing areas were addressed in the GOM, he said the water was usually the best option depending on the location around the city. It was usually the clearest place to land.

Mr. Marshall stated they were not specifically trained on how to deal with passengers that might be intoxicated. He could not recall any guidance on how to deal with an intoxicated passenger. He stated depending on the level of intoxication he might not allow them into the aircraft to begin with. He had never had a passenger come out that he believed had been intoxicated or had been drinking. He never had any occurrence where he even suspected that.

When Mr. Marshall was asked if he had any other safety-related concerns when operating FlyNYON flights, he stated that since the accident, obviously, passenger egress was an issue that needed to be addressed. Prior to the accident, he had no concerns. He thought that the system that was in place was more than adequate for what they were doing.

He said the culture of Liberty and NYON with respect to the handling of safety issues as far as communication was always very good. He said people brought up concerns in weekly meetings that were passed between both companies. For the most part he said he thought those concerns were addressed quickly and adequately.

On the day of the accident, he stated he was scheduled to fly one of the three helicopters that were sunset flights. Of the three, he believed he was the second to depart. He stated the loader, "T", assisted him. He stated he tethered the left side and the loader tethered the right side. He stated he did not have any interaction with the passengers on the accident.

Asked whether the literature said the CX should do the tethering, he said yes, the literature was from last April and as far as he knew the document had not changed but the process had. The SOP he has was from last year.

Mr. Marshall was asked to clarify what he told the passengers to cut with the knife and he stated the tether. When asked if he showed them the tether, he stated that it was on their seat as they get in it.

Mr. Marshall was asked to clarify the three types of float firing mechanisms and he stated that two had an electrical firing mechanism, which was a switch and there was another system that had a compressed air cartridge on the cyclic. The OL aircraft had the one with a cable pull.

He could not recall which CX was assigned to his helicopter the day of the accident. He would have to look at the flight sheet. He said there was usually one for each flight group.

He was asked whether, if the shoulder harnesses for the front seat came undone and retracted, they were easy to reconnect, and he stated it depended on the ship, the majority had two straps over the top and a lap belt. If the lap belt came undone the shoulder straps would retract. He stated if the buckle came off there was a good possibility the shoulder straps would stay on. If he caught it early enough he could reattach while it was still partially secured. He personally has never had an instance where a passenger was not able to reattach the shoulder straps. When asked if it were to happen, how he would have dealt with it, he stated that he believed in mid-air it would be too difficult and distracting to ensure they were back on, so he would make sure the lap belt would be attached and secured.

When asked if the shoulder harness restricted passengers' ability to move their body around, he said no, they would attach them loosely so they would have enough range of motion to swing out and get the "shoe selfies". Initially, the straps were placed over both shoulders, however if passengers complained about not being mobile enough, sometimes they would move the right strap under their arm. The backseat seatbelts were like an auto seatbelt over the shoulder. The CX would usually take care of the seatbelts, he stated he would do it sometimes.

Mr. Marshall was at Northeast Helicopters in Ellington for 2 years as a flight instructor before coming to Liberty. He had been with Liberty for 3 years. He stated the GI bill paid for 90% of his training.

When asked on flights that were not NYON flights, had he ever had any objects or passengers come close to the controls and he stated that some things he paid close attention to, like camera straps, seatbelt on front seat, ladies purses, especially on the right side of the bench seat. Things could fall in that area. Anything with a strap that could hook onto the levers was something he would pay attention to. He stated he was aware of the possibility of objects on all flights. He had to brush objects besides tethers away from the fuel control quadrant in flight. He gave the example of a camera strap when he had conducted a doors-on tour for Liberty. He did not want to say it was common, but a possibility. He stated occasionally, a small child kicking legs around or a lady's purse would be there when conducting a charter flight. He never talked to anybody officially at the company about it being a safety concern but stated it had happened to all of them. It was something the pilots would talk about sitting around the table. It was something senior pilots would bring to junior pilots and raise awareness of the possibility of it happening.

He had never seen the FAA at Liberty before.

Mr. Marshall stated there was not anything pertinent that was not asked.

The interview concluded at 0904 EDT.

11.0 Interviewee: Justin Bosko, Liberty Helicopter Pilot

Representative: Paul Lange, LLP

Date / Time: March 28, 2018 / 0914 EDT

Location: Liberty Helicopter Offices

Present: Van McKenny, David Lawrence, Bill Bramble, Emily Gibson – NTSB; Robert Hendrickson – FAA; Paul Tramontana – Liberty Helicopters; Brian Rosenberg - NYONair

During the interview, Mr. Justin Bosko stated the following:

Mr. Bosko was asked if he had flown FlyNYON flights, he stated yes, and he began flying those flights in May 2017. When asked how many of the FlyNYON flights he had flown, he stated that it was hard to tell, he estimated at least 100. The last flight of that kind he flew was on the day of the accident, and he had just landed at the time of the accident.

He was asked to describe the training he received to conduct FlyNYON flights. He stated that Christi Brown had trained him in April (2017). She went over the restraint system and how it worked, and what it was designed to do. He stated that he did not know if there was any recurrent training but it had not been a year, and that is when recurrent training would typically occur. When he was asked how he was trained, he stated that it was OJT and hands on training

When asked to describe the SOP for FlyNYON flights if they were distinct from Liberty's, he said they advised to ensure gear and tethers were on properly. They stated that the PFDs should be on properly for all passengers, which was the same for all Liberty flights. He was asked if he participated in the development of the SOP. He stated, no. Asked if he was evaluated on adherence to the SOP, he stated, not that he knew of. He was asked if the SOP had changed since they began using it, and he stated that that yes, the SOP had become more in depth, more safety conscious. He was notified about SOP changes in person by the Chief Pilot, and he's 90% sure emails were sent out with the updates. He was not sure when the last update occurred. He stated that he thought the SOPs were adequate and that once the flights went from 100% NYON control to Liberty that the Chief Pilot was more aware of safety concerns did what was necessary to elevate the standard.

He was asked what the SOPs said about how and by whom the passengers should be tethered to the helicopter. He stated that when he started it was just NYON doing the flights and the tethering was done by the CXs and the pilot did the doublecheck. Eventually it was changed such that the pilot was doing the tethering to make sure the passengers were in properly and didn't have too much slack. When asked how the passengers were secured on his flights, he said the passengers were seat belted with regular seatbelts as well as harness and tether. Asked who secured the passengers to the helicopter on his flights, he said towards the end it was the pilots. At times the loader would help with that. He didn't recall if the loader assisted in connecting passengers tethers the day of the accident. He wasn't aware of any CX's connecting passengers' tethers to the helicopter. There were lots of flights that day.

He was asked if the front seat passengers tether was supposed to be routed a particular way and he replied, the only way it could go. No special routing. When asked about the arm rest in 01L have any bearing on how the tether was routed, he said no. Asked whether it went over or under the arm rest, that not all the helicopters had arm rests and that he normally routed it over the arm rest when one was present. When asked if he had flown the accident helicopter, he said yes. When asked about the excess length of tether on the front passenger he stated that he did nothing to secure the extra tether segments, there was no formal practice regarding the excess tether.

He was asked if he had ever seen tethers or other restraint materials in close proximity to or conflicting with helicopter controls such as the fuel controls during a FlyNYON flight, and he said that not that he could recall. He never had to prevent a front seat passenger's tether from coming in contact with the controls. When asked if he regarded passenger restraints potentially conflicting with the aircraft controls as a safety concern, he said, not from his point of view.

He was asked if he had ever had a front seat passenger's shoulder strap come undone during a FlyNYON flight, he said yes. He could not say if it was intentional or unintentional by the passenger, and that it did not happen often, but had happened to him more than once. The passenger was able to reattach the shoulder straps with his assistance. He never had a passenger not be able to get the shoulder straps back on.

He was asked if he had been trained on passenger egress for FlyNYON flights in terms of what they should do to get out, and he said the pilot gives a safety brief, discusses operation of the

seatbelts, and the seatbelt cutters to assist them in cutting the harness or tether. The only knowledge the passenger receives about how to use the cutter comes from the passenger's safety video. The pilots brief the PFD and discuss the general safety equipment on the passengers, it is a general safety brief and not a brief on the egress of the aircraft. When asked how he personally briefed the his passenger if it became necessary to evacuate the helicopter in an emergency, he said he personally discussed how the seat belts worked. When asked if he provided detail about the seat belt cutters, he said, "vague." They use it to cut the harness or tethers, something like that. Asked if he had used the cutter himself, he stated that he had used it on a seatbelt before but not on tethers or the harness. When asked if he had concerns about the passenger's ability to evacuate the helicopter in a timely fashion in an emergency, he said that he thought everyone had concerns. Asked what gave him concern, he said the design of the seatbelt cutter, seatbelt material, and the difference between that material, and the harness and the tether. Asked if he had reported these concerns to anyone, he said, no.

He was asked if Liberty or NYON had an SOP for dealing with intoxicated passengers who showed up for a flight, and he said that the passengers were not to fly if visibly intoxicated. When asked where that was specified, he said, he was sure it was in the SOP. It was something they learned through training. It was something he had learned since he became a pilot. It was "kind of a known thing." When asked if he ever had any passengers show up intoxicated, he said for a NYON flight, no.

He was asked if he had any other safety related concerns with NYON flights, and he said no. When asked to describe the safety culture of Liberty and NYON, he stated that Liberty was by the book and above and beyond regarding safety, they did not like to leave any type of gray areas, so they did what was overly safe. Asked about NYON, he said "I think NYON tries." It was a whole new thing that they were doing, they were trying to be ahead of the curve, and he felt they were doing a good job.

He was asked if he'd been trained on the use of the helicopter float system, and he stated yes. They are trained every year and during the initial training course. Training consisted of how the system works, how to operate the system, powerpoint brief, and hands-on training. When the floats are timed out a pilot gets to pop them in the hangar. He had not personally deployed the floats but had been in the helicopter in the hangar when it was done. He was asked what he expected if he had to pop the floats, and he said that he expected resistance in the cable. He gave an example of a female pilot who had difficulty deploying the cable activated floats. The other systems, Zodiac was operated by CO2 was fairly simple and he was not aware of any difficulties with that system.

When asked if there was a general protocol for an emergency landing in the New York City area, he stated that it is generally going to be the river. Typically that is the safest place. He was asked what he expected the float system to do during a water landing, to which he said that he expected the helicopter to remain upright long enough to egress. Being in New York City, you would only have to wait a minute or two for a ferry or tug. He had seen video of previous successful autorotations to the river, so it was never a concern.

He was asked if he had ever heard of an intoxicated passenger showing up, and he said no. He stated that he was sure there would be no ramifications if he rejected a flight because the passenger was intoxicated.

He was asked if he ever had an intoxicated passenger for other non NYON flights, and he said not with Liberty or NYON, no. When asked about his experience cutting the seatbelt, he said that it was part of his Part 135 training, and that there was a cutter attached to the pilots seatbelt on the right side. He was asked if he was trained to use it for himself or for the passengers, he stated that all the Liberty helicopters have the cutter and can be used for the pilot or passenger.

When asked when he was flying the FlyNYON flights was he getting paid by NYON or Liberty, he responded that the situation changed over time; when he was at Liberty and he was flying FlyNYON flights on the side he would get paid by NYON. He then left Liberty in May 2017 for NYON to fly both 135 and photo flights full time. While at NYON there were a total of four pilots. In October he left NYON because they were reducing the number of pilots and helicopters flying in New York, and he returned full time to Liberty. NYON sent some helicopters for overhaul to Canada. Asked if there was any other reason he left NYON, he said, no it was strictly business. He also stated that he had no safety concerns while he was at NYONair.

He was asked if the cutter that was on the pilots seatbelt the same as the cutter provided to the passengers, to which he stated that he did not know.

He was asked what his title was and how many flight hours he had, he responded that his title was pilot, and had 2,400 hours

He was asked if there was a procedure for checking the floats on preflight, which he responded that there was, he checks the bottle pressure and the condition of the floats. If the bottle pressure was not a certain pressure it would be brought to maintenance and taken care of. It was a MEL item but you could not do tours. It had never happened. When asked if he could do a FlyNYON flight if there was a float system discrepancy, and he said yes, because the FlyNYON flights were Part 91 flights and could be done without popup floats as long as the passengers were wearing PFDs and the helicopter remained within gliding distance of the shore.

He was asked if there was any additional pertinent information relating to the investigation that he would like to share or if he had any questions, to which he said, no.

Interview ended at 0949.

12.0 Interviewee: Craig Anthony Digiovanni, Pilot, Liberty Helicopters

Representative: Paul A. Lange

Date / Time: March 28, 2017, 1001

Location: Present: Liberty Helicopter offices

Present: David Lawrence, Van McKenny, Emily Gibson, Bill Bramble– NTSB; Robert Hendrickson – FAA; Paul Tramontana – Liberty Helicopters; Brian Rosenberg – FlyNYON

During the interview, Mr. Digiovanni stated the following:

He was a captain for Liberty Helicopters. His background included being a flight instructor and he was hired at Liberty in April 2017. He had about 2,000 flight hours.

Asked if he had flown FlyNYON flights he said yes. His first flight was July 2017. He estimated he had done 100 to 200 flights.

Asked if he had operated FlyNYON flights while he was a Liberty pilot, he said a couple were part time for NYONair and the rest were for Liberty.

His most recent FlyNYON flight before the accident was on the day of the accident. He was not flying at the time of the accident. His flight was earlier in the day.

When asked what type of training he had received for FlyNYON flights he said he did one training day on how to conduct the FlyNYON flights when he was part time for NYON. FlyNYON showed him how in a classroom and he went out to the helicopter and their flight director showed them how to put the harnesses on and load the people in the helicopter. He was given a one or two-page document that explained the procedures. Asked if the instructor was Christy Brown he said yes.

When asked if the one or two-page document was separate from the SOP's he operated under at Liberty he said yes. It was a training document that went over everything from loading to where to fly in the airspace, tips on that. Asked if this document was provided by FlyNYON he said yes.

Asked if there was recurrent training for Liberty helicopter pilots on the conduct of FlyNYON flights he said no.

Asked whether there were separate Liberty SOPs when he operated a NYON flight or if they were for any Liberty flight he thought they were pretty similar. He thought any NYON flight was basically going to go the same way.

Asked if he was part of the development of the SOPs for NYON flights he said no. When asked if the SOP's had changed over time he said in minor ways. They were more descriptive on the CX's and pilot's roles, in terms of who needed to do what. When asked if he was evaluated on how he followed the SOPs he said no.

Asked who was responsible for tethering the passengers he said the pilot. When asked if that was the way passengers were secured on his flights he said yes. Asked if he would allow the Liberty loader Ternon to tether the passengers, he said that occasionally Ternon would do it. Asked why he had Ternon do the tethering when the pilot was responsible for doing it, he said he "just trusted him to do it." When asked if he let the CXs attach the tethers he said that in the beginning when he began doing the NYON flights they would do it.

Asked if the front-seat passenger's tether was supposed to be routed a specific way, he said no.

Asked if anything special was supposed to be done to secure excess length of the front passenger's tether, he said that he would try to make sure there was no excess length, but he would try to rout it through the armrest so it would not to get caught if it wanted to hang down.

When asked if he had flown the accident aircraft he said yes. Asked if he recalled how he routed the front tether for that helicopter, he said yes, it was the same as 1LH, so he just ran it under the armrest to their back.

When asked if he had ever seen the tethers or other restraint materials in close proximity to or conflicting with helicopter controls, such as the fuel controls, during a FlyNYON flight he said no.

When asked if he had seen on other flights anything close to the floor controls he said he had seen people drop sweatshirts and cell phones down there on charter flights.

When asked what he did when that happened, he said he would pick up the items himself and not allow the passenger to do it. When asked if he did anything special to prevent that from happening he said no.

When asked if he regarded the potential for conflict between passenger restraints and aircraft controls to be a safety concern he said he was generally aware of them being critical controls for the helicopter.

When asked if he ever discussed or reported concerns about this to FlyNYON or Liberty he said no, not specifically.

When asked if he had ever had a front passengers should straps come undone during a FlyNYON flight he said yes. Asked to elaborate, he said a passenger just undid their seatbelt. He told them to put it back on and that was what they did. They were able to re-secure it He thought they were confused about what they were supposed to do. They were in the process of turning to get a selfie. They started to turn their legs out and they undid their seatbelt. Asked whether he thought they had done it intentionally he said yes. Asked why he thought they had done that he said he did not know and did not want to speculate.

When asked if he was trained on passenger egress from the helicopter he said he was told about their seatbelt cutters and general operation, such as how to undo the carabiners during his initial training with Christine Brown.

Asked to describe the procedure for evacuating passengers from a FlyNYON flight in an emergency, he said he guessed it would be pretty standard compared to any emergency egress. They would need to undo their seat belt, cut their tether, and evacuate at the right time.

When asked how he would personally brief his passengers on what to do if it became necessary to evacuate the helicopter in an emergency, he said he would try to inform them where their seatbelt cutter was prior to takeoff and then make sure each passenger knew how to operate their seatbelt. Asked if he would brief them on where the cutter was located he said yes. Asked if he would ever pull the cutter out and show it to them he said no. Asked why not, he said, "I just didn't."

Asked whether the intention was for passengers to cut the seatbelt with the cutter, he said he would tell passengers they could use it to cut the seatbelt or the tether. He would sometimes say they could use the cutter to cut the seatbelt, harness or tether.

Mr. DiGiovanni was asked whether, when a passenger was in the seat with a harness, tether, and seatbelt, it was important for that person to know which of those three devices they needed to cut, he said yes. Asked why, he said so they could get themselves out if necessary. Asked

whether it would do any good to cut the seat belt if a passenger was wearing all three devices, he said yes, but it depended on the circumstances.

Asked if he had any safety-related concerns about the ability of passengers to evacuate the helicopter in a timely fashion in an emergency, he said just the normal. Asked if he had any personal concerns above the normal concerns, he said no. Asked what a “normal concern” would be, he said it would depend on how much time they had to do it, as in any emergency situation.

Asked if he ever talked to anyone about those concerns he said no.

When asked if he had training for floats he said initial and recurrent training.

When asked what his expectations were that the floats would do, he said keep the helicopter upright for some period of time. Asked how long, he said it would depend on the water conditions. Asked if he was aware of any problems with the use of the float system, he said no. When asked if he had ever blown the floats himself, he said no. He had just seen the floats blown in videos.

When asked about his preference for an emergency landing location, he said on the water if the land was occupied by people and vehicles.

When asked if he had ever had an intoxicated passenger show up for a FlyNYON or Liberty flight he said no. Some of the passengers would drink before the charter flights, but they were not intoxicated. When asked if any guidance he had been provided about what to do if he had one show up, he said yes, he was not to allow them on the aircraft.

When asked if he ever saw the FAA come out to observe FlyNYON and Liberty flights he said he was not aware of it.

Asked if he had any safety related concerns about FlyNYON or Liberty operations that he had not already been asked about, he said no.

When asked to describe the safety culture at FlyNYON and Liberty he said both companies did try to make things operate as safely as they could. They were constantly trying to update and find better ways to do things if they could.

When asked if he thought the SOP's were adequate he said yes. He felt there was an explanation of each step he needed to perform.

When asked if he had ever had issues with passengers coming out to the helicopter with harnesses that were not fitting properly he said "occasionally." Asked if there was any ramification for sending them back for another harness, he said no. If something was not correct he felt comfortable addressing it.

When asked if he had seen any changes in the operation or the SOPs or in how well the passengers were briefed before they arrived at the helicopter, he said yes, the biggest change was being busier and the change from having the CXs do some of the tethering and loading to having the pilots do it. That was probably the biggest change.

When asked if he felt the passengers understood what he was telling them about the use of the cutter, what it was there for and where they should be using it, he said yes. He would say they had an understanding. Asked if the passengers asked follow-up questions about the cutters, he said yes, occasionally they would.

Asked whether the two-page document he was provided in July 2017 was part of the effort to establish written SOPs, he said what he received was provided by Christy during his initial training. It talked about everything from harnessing to how to operate around the flight restriction. Asked whether he thought that document was the beginning of the SOP development or something separate, he said he thought it was separate.

Asked whether cutting off the seatbelt had happened on non-NYON flights during charters, he said no.

Asked whether a passenger had ever purposely or accidentally taken off a seatbelt on a non-NYON flight, he said no.

When asked if there was any other information he would like to share that might be pertinent to the investigation that he had not already been asked about he said no.

The interview concluded at 1035.

13.0 Interviewee: Scott Mills, Liberty Helicopter Pilot

Representative: Paul Lange

Date / Time: March 28, 2018 / 1047 EDT

Location: Liberty Helicopter Offices

Present: Van McKenny, David Lawrence, Bill Bramble, Emily Gibson – NTSB; Robert Hendrickson – FAA; Brian Rosenberg – Liberty Helicopters

During the interview, Mr. Mills stated the following:

He had operated 30 to 40 FlyNYON flights, beginning in October 2017. He operated a doors-on FlyNYON flight the day of the accident. Asked whether that had had anything to do with the temperature outside, he said no.

Asked to describe the training he had received for conducting FlyNYON flights, he said that his initial flight was through Scott Fabia. He went up as a passenger in the front seat while Mr. Fabia operated the flight. Mr. Fabia showed Mr. Mills the route he used and how he conducted a flight. In early November, Mr. Mills also participated in a class at the Liberty hangar where Mr. Fabia presented an SOP he had come up with that described the process for loading. A group of pilots went through that. Some CX reps also attended. Mr. Fabia conducted it. He had come up with 5 or 6 pages describing the procedure he felt would be most efficient and safest to load the passengers and he had them all go through and do it in the hangar in a helicopter. He could not recall which helicopter was used. Asked if there was also an annual recurrent form of this training, he said he was unaware of any.

Mr. Mills was not involved in the development of the SOPs for NYON flights. Asked whether the SOPs had changed since he began using them, he said it seemed there were almost weekly changes when they had safety meetings. It seemed like there was always a change. Asked whether he had participated in pilot safety meetings, he said he had participated in a few. It was a conference call and he would listen in if he was not flying. Asked whether he was evaluated on his adherence to FlyNYON SOPs he said not that he knew of. Asked whether his performance was observed during the November training, he said yes, Mr. Fabia was watching and made some corrections to what he was doing. He could not specifically recall the nature of the corrections, but he recalled Mr. Fabia saying, “We just went over this,” and pointing out that he had already done it wrong. The training was very detailed. Asked if he believed the SOPs were adequate, he said he believed they were adequate at the time. He said a better word to describe them was “thorough.”

The SOPs specified that the pilot was supposed to tether the passengers to the helicopter. Asked if anyone else was supposed to do that, he said no. Asked whether that was how passengers were secured on his flights, he said he did it some of the time. Liberty had a loader named Ternon who was very efficient. He would supervise while Ternon loaded the passengers if Ternon was around, going behind him to check the process by which he had done it. Asked whether he allowed FlyNYON CX reps to tether passengers, he said on rare occasions they would get in there and do it before he could stop them, and he would make sure they were doing it right. Usually the CX reps did not do much. Asked whether the front-seat passenger’s tether was supposed to be routed a particular way on the helicopters with an arm rest on the front seat, he

said he did not know if it was supposed to be, but he made sure they were routed underneath the arm rest. He said he did that because it “seemed like it wouldn’t get wrapped around anything at that point.” It was a “direct line” to the back of the harness. He thought if the tether went over the arm rest it could slide down the armrest and be in the front near the controls. He did not recall any specific training on the routing of the front tether. He had not mentioned a concern about this to anyone, and he had not discussed it informally with other pilots.

Asked whether anything special was supposed to be done to secure excess length of the front tether, he said no, not that he knew of. He did not have an informal practice himself. He did not secure additional loops in the passenger’s carabiner.

Asked whether he had ever seen tethers or other restraint materials in close proximity to or conflicting with helicopter controls, such as the fuel controls, during a FlyNYON flight, he said “never.” He had never had to move the tether or take some other action to prevent a conflict with the controls. Asked whether he regarded the potential for a conflict between passenger restraints and aircraft controls to be a safety concern, he said he did not. He never saw enough slack for it to be an issue.

Mr. Mills was asked if he had ever had a front passenger’s shoulder strap come undone during a FlyNYON flight. He said on one occasion a passenger had inadvertently opened the front buckle and released all four straps. He helped the passenger re-secure the seatbelt, including the shoulder straps. Asked whether the shoulder straps had retracted, he said, “not very much, no.” Asked whether the shoulder straps had reels he said yes, and they would retract but they needed some assistance from somebody to retract.

He had not been trained on passenger egress for FlyNYON flights. Asked to describe the procedure for evacuating passengers from a FlyNYON flight in an emergency, he said it was “For them to cut themselves out. To cut their tether.” Asked how he personally briefed his passengers on what to do if it became necessary to evacuate the helicopter in an emergency, he said that he spoke to them about the life vest, but he did not speak to them specifically about cutting themselves out. He assumed it was included in the safety video. Asked whether he had had safety-related concerns about the ability of passengers to evacuate the helicopter in a timely fashion in case of an emergency, he said, “To myself, yes I did.” Asked why, he said it seemed like a challenging task, and to do what was required, to evacuate as the aircraft was descending under chaotic conditions, it would be difficult for anybody to keep a cool head and do what needed to be done to get out. He had not relayed this concern to anyone. Asked why not, he said, “I felt, I dunno, I just never spoke to anybody about it. I felt we all felt the same way.” Asked if there were any ongoing efforts to improve the situation, he said yes, there were weekly safety meetings. They discussed general safety issues. Asked whether this issue was discussed, he said he did not recall it being discussed.

Asked whether FlyNYON or Liberty had a policy about what to do if a passenger arrived for a flight and appeared to be intoxicated, he said no. Asked whether it had ever happened to him he said no.

Asked if he had any additional safety concerns when operating FlyNYON flights, he said no. He checked as passengers walked to the aircraft. He checked their harnesses, made sure their cameras were secured. He was more concerned with things falling out of the aircraft, so he would check all the loose items before takeoff.

Mr. Mills was asked if there were any problems with harnesses not fitting people properly. He said no, that was one of the things that he checked – that it was snug enough and not falling off them. Asked whether they had the option of using a different harness for a petite passenger, he said yes, they had a blue harness for smaller people that seemed to fit the smaller people better. Asked whether he had ever had people show up in a yellow harness and they should have been in a blue harness, he said that had happened a few times. In those cases, the two straps in the back of the harness would be connected and tightened with a carabiner.

Asked how he would describe the culture of Liberty and NYON with respect to the handling of safety issues, he said he had no issues with Liberty. He believed all the issues were taken care of as far as how they conducted their flights. With NYON he saw that there was an effort to improve safety with the safety meetings, so he did not have any concerns because they were trying to constantly improve the process and increase safety.

Asked whether Liberty pilot representation was adequate at the pilot meetings he said yes. Mr. Mills was asked who attended those meetings. He said it changed every week, but it was the Liberty pilots and some CX personnel. Some weeks even Patrick Day Jr. participated. He believed Moe, the manager for CX attended. The meetings were usually conducted by Christi Brown, the director of operations at FlyNYON. She would be the one to organize and schedule those meetings. Asked if he was aware that Liberty pilots had been excluded from the meetings in 2018, he said yes. Asked who attended the meetings after that, he said he did not know. Asked whether any Liberty pilots continued to attend he said he did not know. Asked whether he felt Liberty pilots' representation at the meetings was adequate in 2018, he said no.

Mr. Mills was asked if he had been trained on the use of the helicopter float systems. He said that during his initial training at Liberty with Brent Duca they had talked about the two kinds of floats, the Apical and the Zodiac, and Mr. Duca had explained how to pull the handle. The handles looked a little different. The Zodiac was set off by CO2 and had one large float on each side. The other had three individual floats on each side. He had not deployed either system. Asked about his expectations if he was to use the floats, he said he believed they would work. He inspected the bottle during his preflight and he had talked to other pilots about how much force it took and how far they had to pull on some of them to activate.

Asked to describe his approach to selecting an emergency landing area, he said they were often flying over the water and when they were not, they were over a heavily populated area. He believed the water was probably the safest location and that would be his choice most of the time.

Asked to clarify whether Christi Brown was FlyNYON's director of operations, he said that was what he thought she was.

He had completed his initial ground training for Liberty in mid-February 2017 and completed his Part 135 check ride in mid-May 2017. His total time was about 2,200 hours, all rotorcraft.

Asked whether passengers still needed to be harnessed and tethered for doors-on flights he said no, they just had to wear seatbelts.

Asked whether all Liberty pilots had gone through the November training, he said he did not think they were all there. Some were probably flying. Asked whether that was the only day the company did that type of training, he said to his knowledge yes.

Asked about the briefing he gave to passengers and whether he only briefed them on the use of their life vests, he said no, he did that while he was putting the vests on them. After they got in the aircraft he would explain to them what to expect on the flight. He would check with them on where they wanted to go and what they wanted to see. For the adventure seats, he would explain that once they saw the bridge he would advise that they could get off their seats, but they did not have to. He advised that it would be very windy, especially on the left side of the helicopter. He explained that the passengers in the middle were only allowed to get down from their seat and back up one time, and that when they got down on the floor they should buckle their seatbelts behind them so they would not flail, and the other passengers should help them with that. He then explained that they could scoot to the edge of the door sill like they had when he was harnessing them in and he would say they would have to get back in the seat and buckled in 2 minutes before landing. He would make it fun like a pop quiz, asking, "Are you taking your seatbelt off? And are you taking your seatbelt off?" He did this to make sure the ones who were not supposed to take their seatbelts off understood. On cold days he would add that if they were uncomfortably cold they could tap him on the shoulder and they could end the flight prematurely.

He did not physically show the passengers their knives or explain where they should cut. Asked whether he thought most passengers understood, he said he could not speculate. Asked whether passengers asked clarifying questions he said no one ever did. They asked about the seatbelts. He would sometimes have them do a dry run with that.

Asked if it was an SOP that the passengers should not move back and forth between their seat and the floor multiple times, he said he remembered that had been an issue on another flight and it had been clarified that the passengers should not be getting up and down throughout the flight.

Asked whether he had continued to receive pilot meeting minutes in 2018, he said he had not.

Asked what he meant when he said he considered the SOPs thorough, he said that things were constantly changing and being taken care of. When he was trained on the procedures he believed everything was thorough and adequate at that time, but the issues were constantly changing. He believed the SOPs were thorough and adequate at the time of the accident.

Asked to confirm that he did not receive pilot meeting minutes after the Liberty pilots were kicked out of the pilot meetings, he said that was correct. He said he believed the last minutes he had received were from December 19, 2017.

Asked to confirm whether the November training was conducted by Scott Fabia, he said yes

Asked whether the accident pilot attended the November training he could not recall.

Asked to confirm that safety issues involving passenger egress were not raised in pilot meetings, he said that was correct. Asked if safety issues ever came up in pilot meetings, he said yes, that was part of what the meetings were about, safety issues. Asked again whether passenger egress was discussed, he said he did not specifically recall that being raised in one of the meetings. Asked if it had ever come up at Liberty or NYON, he said the pilots had discussed it amongst themselves, that it would be difficult for the passengers to cut themselves out because of where the tethers were located, but he did not believe it was officially raised with NYON or Liberty.

Mr. Mills was asked how he typically received minutes of the pilot meetings, and he said in an email. They were sent to his personal email account. He did not have a Liberty or a NYON email account.

Liberty had quarterly safety meetings. NYON had weekly conference call safety meetings. Asked to confirm that the NYON calls were safety meetings, he said yes, they were for safety and general issues. They discussed issues with CX, for example, like what they were doing and not doing. They discussed any gripes the pilots had about what people were doing or not doing. The NYON meetings were hosted by Christi Brown. Asked whether anything was game, be it operations or safety, he said yes. Sometimes they had to postpone the meeting if Christi was unavailable. Asked to confirm that those were the meetings the Liberty pilots were excluded from in December 2017, he said yes. He did not know who participated in the meetings after that. As far he knew they had stopped occurring, unless they were internal to NYON. He did not know. The quarterly safety meetings were held in person at Liberty. Asked whether Liberty held any safety meetings between December 2017 and the time of the accident, Mr. Mills said no, not any meetings that were just for Liberty.

Asked whether he was aware that there was a designated person on the calls for Liberty after December 2017 he said no, he was not aware.

If he had a safety issue after the Liberty pilots were excluded from the NYON safety meetings his point of contact would have been Scott Fabia, Liberty's safety officer.

He had never seen an FAA person at Liberty or NYON. Asked who his director of operations was at Liberty, he said he did not know, he would just go to Paul Tramontana. Mr. Tramontana was his direct supervisor. Asked whether he ever saw Patrick Day Sr. around Liberty offices, he said that prior to the accident he had seen him around about two or three times a month. He had seen him more often since the accident. Asked to describe Mr. Day's position at Liberty, he said "owner operator."

Asked if he had any additional information to share that might be pertinent to the investigation that he had not been asked about he said no.

The interview concluded at 1134.

14.0 Interviewee: Brent Duca, Liberty Helicopters Director of Training

Representative: Paul Lange, LLP

Date / Time: March 28, 2018 / 1311 EDT

Location: Liberty Helicopter Offices

Present: Van McKenny, David Lawrence, Bill Bramble, Emily Gibson – NTSB; Robert Hendrickson– FAA; Paul Tramontana – Liberty Helicopters; Brian Rosenberg - NYONair

During the interview, Mr. Duca stated the following:

His name was Brent Duca, and his title was Director of Training at Liberty Helicopters. His date of hire was October 2011. Before Liberty, he was a flight instructor at Northeast Helicopters in Ellington, CT between 2008-2011. He estimated that his total time was 4,800 hours.

When asked if he knew the accident pilot, he said yes, and that they were instructors together at Northeast helicopters, and pilots at Liberty. When asked his impressions of the accident pilot, he said he was awesome, a great guy, a great stick, had a great mind and a great personality. He said they had flown together, but was not sure if it was during a dual pilot mission. They had not flown together on a FlyNyon flight.

When asked if he had ever flown on any FlyNYON flights, he said yes, beginning about September/October of 2017. He estimated that he had flown a lot of FlyNYON flights, probably about 100 flights. The last time was probably a week or two prior to the accident. He was not flying on the day of the accident.

When asked if he had received training to conduct FlyNYON flights, he said yes, and had received training from Christi Brown at NYONair around August or September of 2017. It was the only training he had received for the FlyNYON flights. He did not know of any recurrent training scheduled for FlyNYON flights.

When asked how he was trained, he said it involved a powerpoint presentation, followed by hands-on training that lasted one day. He was not sure where Christi got her training for FlyNYON flights since she was part of the first wave of NYONair pilots to fly the FlyNYON flights, and he was not sure how they created the training or experimented with before training Liberty pilots.

When asked if he was part of the development of the SOPs for the FlyNYON flights, he said yes, and the idea for the SOPs originated when Liberty started flying the flights. NYONair had been flying them for about 4-5 years, and with Liberty they had a new mix of pilots and CX's when starting with the Liberty pilots. Depending on which pilot/CX combination there was, it varied who wanted to do what. After about a month, they decided to make it safer and more uniform, and wanted a more rehearsed and repeatable way of doing things. He, Scott and Christi Brown got together and put something down on paper, something that could be taught and have an expectation for the pilots to do.

When asked about how much of the new SOP was procedural and how much choreography, he said it was a combination of both. It explained everything from the people coming out to the aircraft from the van, inspecting their clothing, shoes and equipment, and the order of loading and checking to see if the person was ready to fly. It insured the loading was safe and efficient every time, and who was supposed to do what, then checking to see if the equipment was also ready to fly.

When asked if the SOPS had changed since they began using them, he said yes since Christi called it a living document, and they would make changes as they figured out ways to make things safer and operate more efficiently. It was all brand new, and this type of flying had not been done before. Although NYONair had been flying these types of flights for 4-5 years, it did not exist anywhere prior to NYONair, and when NYONair came to Liberty, Liberty asked them how to do these flights, and decided it could be better.

When asked if he was ever evaluated on his adherence to the SOPs, he said no. When asked if he considered the SOPs adequate, he said yes since they covered all safety concerns they had, and it covered how to take 5 people from a van, check them out and make sure they were good to go, get them to the helicopter, perform the flight, and get them out.

When asked what the SOPs said about how and by whom the passengers should be tethered to the helicopter, he said the pilots did the actual attachment of the carabiner and tether to the passengers. When asked if that included attaching the harness to the aircraft with the tether, he said yes, and added that the passengers arrived at the aircraft already wearing their harnesses. When asked if that was how the passengers were secured on his flights, he said yes, and added that Liberty also had a loader that had the same responsibility as a pilot, and the loader would also help tether the passengers since he was trained similar to the pilots. He said the loader was “a sharp guy, on point.” The pilots would still be responsible for double and triple checking. The CX’s could assist, but after November of 2017, only the pilots or the Liberty loader had the responsibility for the tethering. He said he and Scott and Christi came up with the procedures, with input from Moe and Houss.

When asked how they knew about tethers and harnesses, he said he did not know anything about tethers and harness equipment, and was not involved in the selection of the tether system, it was all supplied by NYONair. When asked if any of the restraint system was FAA-approved, he said he knew it was not FAA approved since the harness system came from Home Depot. He did not know where the tethers came from, possibly a rock climbing online store, but never had to buy them and did not know where they came from.

When asked if he allowed the loader or CX to tether his passengers to the helicopter, he said after November, it was the pilot or the loader who tethered the passengers.

When asked if the front-seat passenger’s tether was supposed to be routed a particular way, he said no, he knew where the hard point was to attach the tether from the aircraft to the harness, but there was no specification on how it was to be routed. When asked how he would route it on the accident aircraft, he could not tell if he would have routed it above or below the armrest, and

would just look at it and route it by what made sense based on if it was a short or tall passenger, and would route it by the best way to get there.

When asked if there was anything special supposed to be done to secure excess length of the front tether, he said typically it would hang down or he would clip the excess up into the carabiner. There was no SOP for it, and he would typically try to get the excess out of the way, but it was not the same every time. It was variable based on the type of tether and how short or tall the passenger was.

They had multiple types of tethers. The current ones had black rings with green on one end and yellow on the other end. If they ran out of tethers, they would go back to the older ones that were just a webbing, and you would shorten it up the best you could.

When asked if he had ever seen tethers or other restraint materials in close proximity to, or conflicting with helicopter controls, such as the fuel controls, during a FlyNYON flight, he said yes, and it was a general thing that any A-star pilot had to look out for like camera straps or whatever, and it was a vulnerability that was covered in training. When asked if he ever had to move a tether or something out of the way, or take some other action to prevent a conflict with the fuel controls, he said probably not, had not had an “oh my god” moment. When asked how often he would experience that type of event, he said it depends.

When asked whether he regarded the potential for a conflict between passenger restraints and aircraft controls to be a safety concern, he said yes, and if you were to get something underneath there that could pull up on the fuel lever, it could cause an engine failure. Pilots would talk about that potential through shop talk, but there was never anything official shared with the company. It was an issue with any A-star operation, not just FlyNYON flights. He would teach an A-star guy during new hire training to always guard that area from camera straps or whatever. He said he was the guy who would drill that into their brain, and taught that it was one vulnerable area in the machine.

When asked if he ever had a front passenger’s shoulder harness and seat belt come undone during a FlyNYON flight, he said no. When asked if he ever had a passenger intentionally unbuckle their seat belt, he said he could not say, but added the seats belt may have come off inadvertently once or twice. They were aware of the issue since on FlyNYON flights, the only ones wearing their seat belts during certain portions of the flight were the outside passenger on the rear bench seat. If the outside seat belts were to come undone, he would notice it since the belts would beat against the side of the helicopter and make noise.

When asked if he had been trained on passenger egress for FlyNYON flights, he said no. When asked whose responsibility was it for ensuring passengers understood how to get off the aircraft in an emergency, he said “that would be the pilot. You’re the only guy there.”

When asked to describe the procedure for evacuating passengers in an emergency on a FlyNYON flight, he said there was nothing specific written down or set in stone, and it would depend on the circumstances like if the aircraft was upside down on land or in the water.

Typically, it involved unhooking normally or taking the cutter and cutting the seat belt, but he could not give a specific answer since the events would lead him to take the appropriate solution.

He said passengers were briefed on how to cut the tether, and FlyNYON conducted that briefing through a safety video. He had never seen the entire safety video, and he did not know if other Liberty pilots had seen it.

When asked how he personally briefed his passengers on what to do if it became necessary to evacuate the helicopter in an emergency, he said he briefed them to use the knife to cut the tether. When asked when in the loading process he would brief the knife, he said it varied, and could be before they got in the aircraft. He made sure the passengers knew where the knife was, and sometimes would have them point it out for him. He never asked the passengers to take the knife out of the pouch when he briefed them.

He said he tested the knife during the November 2017 training with an opportunity to cut a tether. He said it did cut through the tether, but it was not spectacular, and was not like cutting butter. Some guys took 3 seconds to cut through, and others had to wiggle the knife, and took them 10 seconds to cut the tether. It really depended on how good with a knife you were, and they wanted everyone to see it during training. The most successful technique was to take a rounding motion, making an elliptical pattern, and work the knife back and forth a few times. They tested it by holding the tether as it was tied off to the front of a dolly which gave it tension before cutting. Asked whether they had practiced having someone cut it behind their back, he said no, they wanted everyone to see, and they just wanted to take an end link off to practice a couple of times. He was not sure if the successful technique they saw during that training was consistent with how it was shown in the passenger safety briefing video.

When asked if he had safety-related concerns about the ability of passengers to evacuate the helicopter in a timely fashion in an emergency, he said yes, but it was not a straight up yes or no. He looked at it as every time they flew, there were risks. If they identified a safety issue, he and Scott and Liberty had it identified as something they could improve. It became an issue of does the system work, and for things like the possibility of buying more vans, the harnesses or tethers, or the cutters, and if they could make it better. For anything that touched the operation, it was Liberty that was primarily effecting the change to make improvements.

When asked about NYONair's response to Liberty's suggestions for change, he considered it a "stalemate," and that NYONair was not as receptive to the changes. He would reach out directly or pass his suggestions through his chief pilot at Liberty. His coordination with NYONair was with Ethan Fang, Pat Day Jr. Moe, Houss, Jenna, Jillian and sometimes Brian. He believed he also would include Christi on the emails or texts or off-hand conversations.

When asked to clarify the comment "stalemate," he said NYONair would get their suggestions and tell him, "We'll work on it. We'll get around to it. Yup, I'll catch up with you later." It was never a flat-out "no" but it also was never anything like "amazing idea, let's do it." It was always the opposite.

When asked if he had any operational concerns about the flights other than the equipment, he said no. From the flying side of things, they were doing a great job. But they knew that although it was safe, it could be better.

When asked about their emergency landing guidance, he said it was in their training, which was scenario-based, as well as their guidance, and that water was considered your LZ (landing zone) in the event of an emergency autorotation since you do not want to crash in central park and take out children.

When asked if he ever had passengers show up to a FlyNYON flight intoxicated, he said no. When asked what the Liberty guidance was for intoxicated passengers, he said they did not fly.

When asked if he ever saw the FAA observe one of the FlyNYON flights, he said yes, and he believed one of their PMI's came out one day to observe loading of a flight. He could not remember the exact date, but it was cold outside, so it was likely September, October or November 2017. They just observed the loading from about 30-50 feet away from the aircraft, and were standing and watching it as a whole. He did not know if the FAA provided any feedback from their observation of the loading.

When asked to describe his roles and responsibilities as training director for Liberty, he said it involved training new hires and recurrent training, both flight and ground school, on the A-star and Twin-star. He said there was no breakout between part 91 or 135, and taught it all in one shot. His position as director of training was not a part 119 position.

When asked about his coordination of procedures training with NYONair, he said he was the Liberty director of training, and in September 2017 when NYONair got its part 135 certificate, they brought Paul and he onto the NYONair's East West 135 certificate as contract flight instructors and check airmen. He said he just provided instruction for the East West certificate

He said Pat Day Sr. was the Director of Operations on the East West certificate, and the certificate was held at the Cincinnati FSDO. He did not know who the East West POI was. When asked if he knew who the POI was for the Liberty certificate, he said it was Dennis Kaskovich. He would see the POI at least once a year, if not more, when he would sit in on one of their training classes. The POI had also observed him (Duca) conduct a checkride in the aircraft before, which was not a FlyNYON flight. He said the POI was not present during the late 2017 observation of the FlyNYON flight.

When asked if he had observed the FAA conduct any surveillance activity on a FlyNYON flight other than the November 2017 visit, he said no.

When asked about the NYONair pilot safety conference calls, he said those started when Liberty started flying FlyNYON flights in September or October of 2017. With that, they were invited to participate on the conference call/safety meeting; a weekly group call. They would discuss everything from getting a new van, basic company information, and it was an opportunity for pilots to put forth any comments they had. When asked if the frequency of the meetings changed, he said no, they were weekly, but sometimes they would skip a week. The Liberty

pilots were asked not to attend after the January call since Liberty pilots were complaining about bits and pieces, and NYONair thought there was too much complaining, too much talking and then they were dis-invited. He later found out they started a whole new series of meetings without the Liberty pilots.

Anybody could be on the call initially, and it began with at least a handful of Liberty pilots. He thought Scott got to stick around after the January call, but could not remember how that all went down since he (Duca) was out of the loop.

They would get the minutes to the meetings through Christi, who took notes and emailed them out in a group email. That would go to all the Liberty pilots, and all the NYONair managers, and he received his copy through his Liberty Helicopters email account. Not all Liberty pilots had a Liberty email account. He said he also had a NYONair email account since he was an instructor on the East West certificate for NYONair.

When asked how often he interacted with NYONair management, he said often. It varied from sometimes multiple times a day to every few days.

When asked how safety concerns in general were received by NYONair, he said the same as before. Typically, it was either a no, or that they would get back to you. Sometimes NYONair management would “chastise” him. When asked who at NYONair would chastise him, he said Pat Day Jr. was the main one, and sometimes it would be Ethan Fang or Moe, who was one of their line guys. Those were the main ones.

When asked if, other than being an instructor at NYONair on their 135 certificate, if he held any other positions at NYONair, he said no, he was considered their primary instructor, and could be considered their director of training on their part 135 side.

When asked to clarify his “chastise” comment, he said he was being chastised as a Liberty employee by the CEO of NYONair. It was weird to differentiate as one or the other, so he could not tell what they were thinking, if he was a Liberty employee or NYONair employee, but he typically communicated with NYONair through his Liberty email. When asked if the Liberty Director of Operations was kept in the loop on those communications, he said yes and no. The DO was aware, but he did not know if the Director of Operations was copied on all the emails. He said the chastising comments were sent in a group email. Following the January meeting where they brought up various concerns, the CEO plainly smited them.

When asked if he had any other examples, he said there were text messages between him and the CEO regarding cold weather flights. There had been no set temperature limits for the FlyNYON flights, and for when they should be limited to 15 or 30 minutes, or with the doors closed. As Liberty pilots, they wanted to set a number but NYONair refused. One morning it was going to be 26 degrees at takeoff, and he thought that was too cold for a 30-minute flight but fine for a 15-minute flight. He called Kai in their operations center and advised him, and was told to contact his Director of Operations at Liberty and advise him, which he did. The Liberty Director of Operations was fine with the decision and told him to do it. He then advised Kai that “senior’s ok with it.” They then sat back and waited for a response from the NYONair CEO, who then

texted him with a screenshot of a text from Ethan Fang, who was making fun of Liberty pilots taking the easy way out, and making reference to the tight financial situation at Liberty, instead of suffering through the cold that day “which we thought was insane.” Pat Day Jr. then proceeded to send out a rant via text “tearing me apart.” He told the CEO that it was too cold, and it would warm up later in the day. That text was sent to his personal phone, and the Liberty chief pilot was included.

When asked if he made Pat Day Sr. aware of the text messages from the NYONair CEO, he said he was not sure. Liberty agreed that his decision was correct, and they fully supported his decision to limit the cold weather flights.

When asked if he considered the text messages from the NYONair CEO as intimidation, he said yes.

When asked if he was aware of any risk analysis conducted on the FlyNYON flights, he said not a formal one. They would all talk shop, and NYONair gave them a developed product and said to go out and do it. He said Liberty told NYONair that they knew NYONair had figured out how to operate these flights, but Liberty thought there were things that could be done better.

When asked if there was ever a full evacuation drill done on a FlyNYON flight, he said no.

His chain of command at Liberty was to report to his chief pilot. For the NYONair side, he thought it was the NYONair chief pilot, but wanted to elaborate that it was different on that side since the NYONair structure was not a “homogenized chain of command.” He was a piece inserted into the NYONair puzzle, and he was typically kept separate from their regular chain of command and the day to day operations. He said it was “weird.”

When asked if he felt any influence to pass people he felt should not be passed on the NYONair side for the East West certificate, he said no, and if they passed, they passed, and if they did not, they did not. When asked about his pass/fail ratio, he said everyone passed except one guy, who washed out.

When asked if there were any other safety-related concerns when operating FlyNYON flights, he said no.

When asked to describe the safety culture at Liberty with respect to handling safety issues, he said it was “awesome.” He had been at Liberty for 6 years, and it did not matter what subject he brought up. If he had an issue, he could bring it to the “senior or Paul,” and either one would jump on it and fix it.

When asked to describe the safety culture at NYONair with respect to handling safety issues, he said to his knowledge, it was weird since he was not a part of them, but he interacted with their safety culture. He said “their safety culture sucked. If it wasn’t cool, if it didn’t support the brand, if you weren’t a team player, it didn’t fly. Guys were chastised, you knew not to challenge NYON.” He said if you did something that would prevent Pat from making money, it was going to come back at you. It was inherent in any pilot, if anybody had anything to do with NYONair,

and it was something that was not good for NYONair, knew it was going to come back around again.

When asked if, as a Liberty pilot operating the FlyNYON flights, he had ever been told his employment was predicated on doing the FlyNYON flights, he said yes. With NYONair being Liberty's biggest customer, NYONair made it very clear that if Liberty was not flying the FlyNYON flights, then they did not need them. It never came from Liberty, and in the beginning with Liberty it was always whatever you were comfortable with and whatever worked. Liberty was always very accommodating.

When asked who advised him that his employment was predicated on the FlyNYON flights, he said he could not tell, it was just a feeling the pilots had, and it became inherent. It was more of an atmosphere with the Liberty pilots. When asked if there was anyone at NYONair who specifically provided this feedback about Liberty's pilot employment being tied to NYONair, he said it was from Pat Day Jr., via texts, and you could read between the lines to see what he meant.

When asked to explain how he knew his job as a Liberty pilot depended on NYONair, he said "you have to look at it from the top end." Drew Shaffer was one of the owners at Liberty, and dealt directly with Pat Day Jr. If something came down from the top from Pat Day Jr. and came across the top to Liberty, and then straight down, and a pilot could be without a job. He said that it would flow down, and that the pressure would flow through all of the Liberty pilots.

When asked if the owners of Liberty made him fear for his job, he said he did not know the owners of the company but knew the atmosphere and that the owners of Liberty and NYONair communicated, and that was an influence. He said he knew that Pat Day Jr. went to Drew initially about flying the FlyNYON flights, and whatever happened, happened. If Pat Day Jr. complained to Drew, it would come to him and he had to follow his marching orders. The pressure went through all of them. They all knew who the owner of NYONair was, and whatever would come down the tree would come down the tree.

He said that Liberty supported him on the cold-weather call, specifically his chief pilot and DO. He said his DO said it was a good call, and to make the 30-minute flights into 15-minute flights happen, and he did not question his decision. He stuck to his guns and delayed the flights. He never followed back up with his DO.

When asked what safety programs were in place at Liberty at the time of the accident, he said they had a safety program in place, including incident reports they could fill out, and annual safety meetings held quarterly. He believed they were working on an SMS program. Liberty did have a written safety policy, and it was contained in their safety manuals. He could not recall exactly what the statement was. When asked whether FlyNYON had a safety program, he said unknown. When asked who was responsible for managing safety at Liberty at the time of the accident, and he said Scott Fabia was their safety officer until he left several days ago. The primary responsibility for managing safety at Liberty rested with Scott. When asked if there was any Liberty manager with the responsibility for managing safety, he said their company was

really small, just him, Scott, the chief pilot and DO. When asked who at NYONair was responsible for managing safety, he said that was unknown.

When asked to describe Scott's role as safety officer, he said it was maintaining the safety training jackets, folders, and training the loaders at the downtown tour operations and assigning training online like the FAA safety course. In general, if someone filed a safety report, he would be the guy who would receive it. When asked how effective Scott was in that role, he said Scott was very good. He would never back down, was very up front and would seek out safety issues. The primary topic of conversation was the FlyNYON flight issues, and Scott was always proactive and trying to do things better. He said Scott had adequate support from Liberty management, both from him and the chief pilot. They both liked Scott. Scott took a new job recently, and was no longer employed by Liberty.

When asked when he first realized there might be some difficulty cutting the existing tethers, he said they never thought there might be a hardcore difficulty to cut the tethers, but started looking at it in November 2017, and they were always looking to find a better way to cut the tether.

When asked his most prevalent safety concerns for FlyNYON flights prior to the accident, his top concerns, he said; 1) new safety video, 2) a change in the harness, 3) change in the tether, 4) change in the cutter.

He said the old safety video showed the yellow harness, and the plan was to completely replace the yellow ones with the blue ones. It also showed the life vests stowed in the left chin bubble compartment, and those were to be worn in flight. Liberty told NYONair that the life vests had to be worn and Liberty wanted that to be reflected in the video. Liberty pilots were briefing the passengers on how to wear the life vests, and also wanted them to use the blue harnesses.

When asked if there was any conflict in the request to use the blue harness, he said yes, and NYONair had decided to use the blue harness, which Liberty thought was good since they were superior to the yellow ones. Liberty was told NYONair would purchase more blue harnesses, which fit and worked better. Pat Day Jr. said that he spent \$30,000 on getting a bunch of the new harnesses, which also had a different attachment point for the tether on the chest, upper back and lower back. The chest attachment was primarily used for hoisting out of the helicopter with a rope, and they did not use that one. Liberty looked at the new blue harnesses as an improvement since passengers could reach their own carabiner on their lower back above their rear end. When asked what happened with the order, he said Liberty waited on them and was told they were coming, and then only 2 or 3 would show up. They were told it took a while to make the harnesses and that they were coming. One month turned into four months, and at the January 11th pilot meeting they asked about the new harnesses, and Ethan told them they would get back to the Liberty pilots regarding the blue harnesses. Christi Brown talked to Ethan Fang, and she then told the Liberty pilots they had decided to cancel the order for the blue harnesses because the yellow harnesses were legal and good enough, and there was no need to do anything extra.

When asked the source of the information, he said Ethan Fang. When asked whether Ethan had said where it came from, he said "I can only imagine." The January 11th pilot meeting minutes

stated that they should try to use the blue harnesses first, and there was a discussion that went back and forth with Moe and Pat Day, Jr. telling the Liberty safety officer and the accident pilot that pilots were not allowed to query or question the harnesses, there was no safety concern with the yellow or blue harnesses, which came from Pat Day Jr., who said to the Liberty pilots were not allowed to question the harnesses. He said that Pat Day Jr. told them in no uncertain terms that the “yellow harnesses were just as good and legal as the blues ones, and they were already doing more than needed and ‘don’t go there.’”

When asked for his take-away from Pat Day Jr.’s response pertaining to them raising the concern about the blue versus yellow harnesses and the availability of this safety equipment during the January call, he said it was disappointment, status quo, and a reinforcement of the attitude and atmosphere and the safety culture at NYONair, and “the man has spoken.”

When asked why Scott was removed from the pilot meetings, he said he did not know since he did not get the minutes of the meeting to see what went on.

When asked about the Liberty pilot representation at the NYONair pilot meetings with Scott as the sole representative of Liberty pilots, he said he was okay with it, but would have liked to have been involved himself, as would the other pilots.

When asked what the root of the conflict was behind Liberty and NYONair, and if it was differing cultures or something else, he said he wish he knew, and could only speculate. He did not know why it was like it was, and it should not have been that way.

When asked about the changing minimum operating temperatures outlined in the late 2017 meeting minutes, he said NYONair flights prior to Liberty were their own self-contained operation. NYONair aircraft had dual sliding doors and had the ability to open and close them in flight. With that luxury, they had the ability to set minimums much higher and shut the doors when the temperatures were in the mid-50’s. That was where the first limitation of 45 degrees came from. When Liberty started operating the FlyNYON flights, their aircraft did not have sliding doors, so they had to refine the limits. It was perfectly safe and doable, but it was going to get cold for the pilot, and they were trying to figure out where the limit should be; how cold was too cold, and where did it become unenjoyable for the passengers and pilot, and try to set that limit in stone. It also involved setting expectations for the passengers if the flights were to have the doors closed. Liberty tried to set limits for a long time; below 35 degrees should be a 15-minute flight, and below 30 degrees the doors should stay shut. NYONair did not want those limits, and wanted to play it by ear because they lost their wiggle room with a set limitation. Liberty stuck to its guns, though the limitation was never made official until later. For his conflict in delaying the flights, he stuck to the limits and the Liberty chain of command stayed with him all the way to the top. He was immediately chastised by Pat Day Jr. for the loss of revenue.

When asked to describe the impact of the conflicts between NYONair and Liberty over safety issues have on the overall management of the safety of FlyNYON flight operations, he said the impact was that things did not get done, and it affected pilot morale. It was hard to put into words, but things just did not get done. NYONair did just enough to make them think things

were going to get done, like the safety video or blue harnesses, but it ended up just resulting in a butting of heads. Liberty had one way of operating and trying to make it better, and NYONair did not reciprocate back.

When asked if he was aware of the Miami shoe incident, he said he knew someone had lost a shoe, and Pat Day Jr. had informed him via text. He believed it happened more than a month ago, and the pilot was told by Pat Day Jr, through Christi, to make sure he understood what he was supposed to do and make sure shoes did not fall off in flight. He thought there was more training involved with the pilot, but was not sure. Pilots were required to check each person for loose hair, scarves, camera gear, and loose shoes. NYONair had figured that out a long time ago, and he always did a shoe check for security. He did not know if the pilot involved was a Liberty pilot or a NYONair pilot.

Liberty did have aircraft and pilots employed at other NYONair bases other than New Jersey.

When asked about the October 8, 2017 minutes that mentioned a failure of GoPro mount, he said he did not know about that.

When asked about the September 2017 minutes involving blue tape on the seatbelts, he said NYONair had been using blue painter's tape to tape over the seatbelt latches on their flights, and that was immediately one of the things Liberty said was not going to happen on their flights. NYONair obliged with that change. The concern with the tape was that it might restrict a passenger from removing the seatbelt if they needed to.

When asked why Liberty left the TOPs program, he said he was told it cost too much money. That was the rumor, and he believed it was for financial reasons. That occurred prior to the accident.

When asked why Liberty brought in a loader, he said it was to make things more efficient. The loader was initially brought in for the tour flights, and then Liberty trained him for the FlyNYON flights as well. He said it was definitely safer to have somebody extra on the FlyNYON flights.

When asked if there was anything in the SOPs to address passenger egress, he said no. When asked if he believed passengers understood his pilot safety briefing, he said yes, but they rarely asked any clarification questions.

Regarding his conflict with Pat Day Jr., he said the communications were in different forms, and could not remember if they were all text messages or emails.

When asked further about the cold-weather issue, and if he had ever followed up with the Liberty DO, he said the decision had been made, and if there was a CEO yelling at him, he did not care if it was the right decision, his chain of command was already okay with it.

He said Scott Fabia voluntarily left Liberty.

When asked if he saw a passenger come out with the wrong harness, did he have the authority to ask for different equipment, he said yes, and that had happened to him before. When asked if there were any ramifications from his decision, he said yes, and it came Moe with NYONair, who would think Liberty was purposely trying to delay flights.

When asked if he thought NYONair was growing too fast, he said it was hard to say since he only knew about the New York operation.

When asked if he felt there was adequate time to brief the passengers before a flight, he said yes, and Liberty did not change the way they did things just to make sure the flight took off on time.

When asked about his first reaction when Liberty was approached about flying FlyNYON flights, he said they were fun and liked flying them. They were a change of pace instead of doing loops around the city, and it was always different and enjoyable flying with the doors off.

When asked if he got the impression NYONair was moving more to an in-house pilot work force, he said yes, and Pat Day Jr. had told them that. He said Pat's exact words were something like the new guys would support the brand and would be more customer service oriented. Pat believed that Liberty pilots were delaying flights during loading, replacing equipment, turning passengers away who were not fitting in their harnesses, and ruining the product or brand, which led to customer complaints instead of focusing on the experience.

When asked if it was his impression that the reason Pat felt Liberty pilots were not supporting the brand was because they were raising too many safety issues, he said he did not know what Pat was thinking. When asked what he thought it was, he said yes, Liberty pilots were a pain in the ass with regards to safety related items.

When asked when he anticipated NYONair transitioning to a majority of NYONair pilots flying FlyNYON flights, he said spring of this year. The Liberty pilots would be gone, and he did not anticipate any getting hired by NYONair. Liberty would still be flying charters. When asked if Liberty pilots were worried about their jobs, he said yes and no. There were less flights now, but they got busier flying during the spring time, so there should be plenty of flying. He was not sure about the health of the helicopter industry or other operators in New York City, but Liberty was in the process of bringing on additional pilots

He said there was no difference in pilot pay between Liberty and NYONair tour flights.

When asked if NYONair was involved in any Liberty pilot meetings, he said the pilot meetings were NYONair meetings and the Liberty pilots participated, and NYONair was not involved in any of the quarterly Liberty meetings.

He said Liberty had not yet assigned a new safety officer to replace Scott Fabia.

When asked if the passengers on the FlyNYON flights were paying passengers, he said yes, they were paying passengers. When asked how the flights were conducted under part 91, he said it

was through the 119 exemption for photo flights, allowing them to operate under part 91. He did not know if any of the flights were operated under an LOA with the FAA.

He said the floats on the aircraft were trained, and it involved actual demonstration on how to operate the float handles, how it was supposed to operate, videos, ground instruction, and general knowledge about the subject. He had never actually inflated an Apical, but had in the Zodiac. It was not a full deployment but an actuation of the handle. It did have some resistance.

When asked what his expectation was if he had to activate the floats for a water landing, he said he would expect them to fully deploy in 1 -3 seconds with a big bang and lots of noises. Once landed on the water, he would expect the aircraft to remain upright.

When asked if in training there was mention of the possibility of an incomplete float inflation or rollover once landed on water, he said yes, and he taught to get the floats deployed earlier rather than later so in case you pulled the handle and nothing happened, you could make something better of it. The floats were designed to keep the aircraft upright, but in rough seas it might tip over and your experience might vary. When asked about his instructions to the passengers for egress, he said once on the water he would advise them regarding the deployment of the life vests. He said that once you were on the water, you were no longer the captain of an aircraft but instead the captain of a boat, still in charge of the safety of the passengers.

He had never had any maintenance issues with the float system.

When asked if he had anything else he would like to add that might be pertinent to the investigation, he said no.

Interview concluded at 1530.

15.0 Interviewee: Dennis John Kaskovich, Principal Operations Inspector, FAA

Representative: Matt Smith, FAA

Date / Time: March 29, 2018 / 0815 EDT

Location: FAA Flight Standards District Office, Saddle Brook, New Jersey

Present: Van McKenny, David Lawrence, Bill Bramble, Emily Gibson – NTSB; Robert Hendrickson – FAA; Brian Rosenberg – Liberty Helicopters; Paul Tramontana – Liberty Helicopters

During the interview, Mr. Kaskovich stated the following:

He was 65 years old.

He was the principal operations inspector (POI) for Liberty Helicopters.

He joined the FAA in 2009. Prior to that he was employed by IBM. He had retired from IBM after working for 25 years as corporate pilot. There, he was a captain on the Falcon 2000 and

Sikorsky S-76. He had joined IBM in 1984. Before that he worked for Simuflite and FlightSafety International. Before that he was a helicopter pilot in the US Army from 1970-1975.

Asked if he was current on any aircraft, he said FAA operations inspectors went through quarterly EBC training, but he was not current on any type of aircraft, such as the Falcon.

Jeffrey Bulmer was the POI for Liberty before him. He did not know why he had left.

Asked about the structure within the FSDO related to the oversight of Liberty, he said that, starting from the top down, there was the FSDO manager George Bennet, and under him there were two front lines, the operations front line manager Greg Pionzio and the airworthiness front line manager. That was it for management. The Liberty oversight team specialties were operations (himself), airworthiness (Tom Mancuso), and avionics (Joe Martuge).

Asked to describe his roles and responsibilities as POI, he said that the POI was the operations specialist. He was concerned with general operating rules from the pilot's perspective and all the oversight that would be related to flight operations rather than airworthiness tasks. He gave check rides and ensured the currency of all Liberty pilots. He approved or accepted training programs, GOM manuals, training manuals, and revisions to said manuals. Through surveillance he assured Liberty was complying with the operating rules, both 91 and 135, and engaged in appropriate enforcement of course, where necessary.

Asked how he found out about the accident, he said TV. He was on family medical leave and saw it on the news. Asked about his response to the accident, he said he was on leave, but the FAA had in place inspectors to react to such accidents, and that most certainly went into effect. He said he assumed whatever appropriate accident investigation teams went out. He thought Farmingdale FSDO was involved. No one from his office had contacted him or sought his assistance, as they were respecting the sacredness of his family medical leave. He had since returned to the office.

He did not know the accident pilot. He had not reviewed his records or the operator's since he returned to work. There had been an accident investigation team working on it, and he had not been asked to contribute to that effort, but he would do so if asked. Asked whether Farmingdale had requested information from his office, he said he did not know. They had not requested any from him personally.

Asked what guidance he used to perform his job, he said there were three tiers. The biggest priority was the rules or CFRs. Next would be policy, with the primary publication being notices and orders. Guidance would be the third, and the primary reference as the 8900.1.

Asked about his current workload, he said he had five 135 certificates. That included Liberty (which was on-demand with multiple aircraft), Heliflite Shares out of Newark (which was on-demand with fewer aircraft), and AAG or Associated Aircraft Group out of Poughkeepsie (also an on-demand operator). The other two 135s were a couple of single-pilot or small-scale operations. Cobalt Jets had one Cessna Citation and one pilot. Air Metro had two aircraft and one

pilot. Asked which 135 he devoted most of his time to, he said the three biggest: Liberty, Heliflite, and AAG.

Asked what he knew about Liberty Helicopters, he said they were an on-demand 135, helicopter operator primarily based out of Kearney, NJ, and operating several single-engine turbine helicopters. Their operations included charter under 135 and they were also one of the bigger sightseeing operators in the New York metro area. They possessed a Part 91 sightseeing letter of authorization (LOA) that allowed them to do sightseeing outside their 135 certificate. He said he could not quote their number of pilots.

Mr. Kaskovich's point of contact at Liberty was Paul Tramontana and he normally communicated with him almost weekly or at least a couple times a month. It fluctuated based on their workload and sometimes the FAA's. He was not sure when his most recent communication with Mr. Tramontana occurred before the accident. It was probably in conjunction with the conduct of a check ride he gave to Mr. Tramontana, probably within the previous couple months. It could have been a 298 ride or a check airman observation for Mr. Tramontana.

Mr. Kaskovich physically visited the Liberty facility about once a quarter.

Asked about his work plan for Liberty he said it was organized under their computer SAS program, a risk-based system. What that system did was assign areas to surveil that had been determined by the SAS folks, after scoping out the operator. It was a series of questions that drove the inspector into surveilling in a number of categories: flight operations, dispatch schedules, manuals, and management. They went out to Liberty and did these SAS surveillance tasks about once a year. Often as part of SAS, they had to evaluate Liberty's training program, so often Liberty would notify him that they were going to conduct an initial training, so he might also visit Liberty separately to cover those items. Prior to the accident, the most recent SAS oversight visit had occurred toward the end of the last quarter of fiscal 2017, probably a few months ago.

Asked who the director of operations (DO) was at Liberty, he said Patrick Day Sr. He virtually never interacted with him. Asked why, he said that in most cases his operational interactions were with a hands-on management person, and that was Mr. Tramontana. Also, most of the time Mr. Day did not seem to be present. Mr. Kaskovich would ask for him if needed, but he did not need to ask for him most of the time. Asked if Mr. Day's name was listed as a 119 position on Liberty's operating certificate, he said yes. Asked about the last time he spoke to Mr. Day about his role, he said he could not provide a date. It had been quite some time, more than a year. He had not seen Mr. Day during any of his SAS visits. Asked if he was aware how Mr. Day was involved in the operation of Liberty, he said that he would be unable to add anything beyond the regulatory description of the roles and responsibilities of a DO.

Asked whether Mr. Day was a DO on another Part 135 certificate, NYONair, he said he did not know. Told Mr. Day was also the DO at NYONair and whether that was permissible, he said that was not uncommon. They would sometimes find that people were managers for different companies, but he had not been aware of this instance. Asked whether, based on his knowledge of Liberty's operations and complexity, he would be concerned that the DO was on two 135

certificates, he said it he had never thought it was a good idea. He thought the roles and responsibilities associated with the DO were such that it required a certain degree of focus and attention and dedication to that role for a carrier and there was the potential for spreading oneself a bit thin. Asked whether that explained why he never saw or interacted with Mr. Day, he said he did not know.

Asked whether he was aware that Liberty had an air charter contract with NYONair, he said if that was a fact, no. Asked whether there was anything from a regulatory surveillance aspect that would be relevant to an operator contracting with another one, he said that if they knew there was a 135 connection between any two operators the picture would change “quite a bit.” He said operational control would become an issue. That was the first thing that came to his mind. They needed to have a clear definition of authority as to who was doing what when. Also, if there was a Part 135 charter contract between Liberty and NYONair, they would be talking about 135 operations and not Part 91 operations and it would change the picture quite dramatically as to how they might surveil a task. He had not seen this contract and he was not aware of it. Asked whose responsibility it was to inform the FAA about it, he said the burden would be on the operator to inform them about any operations they planned on conducting, and that would typically be done in writing.

Asked whether he knew that FlyNYON flights were being conducted by Liberty aircraft, he said yes. He had been approached by Liberty advising him that they were planning on participating in such operations in fall or early winter 2017 - “Novemberish.” Paul Tramontana had informed him. Asked for his knowledge of the operation, he said Mr. Tramontana was the one who filled him in initially about FlyNYON and the type of operations they did. He had never heard of FlyNYON or their type of operation. That was before the date they planned on beginning operating FlyNYON flights. It was maybe a couple months beforehand during one of their meetings. He previously had no idea FlyNYON even existed.

Mr. Tramontana seemed to have already done his homework on the ability to conduct such operations under Part 91. Mr. Kaskovich verified that by looking into the CFRs and policies and the 8900.1. Asked if there was anything about it in the 8900.1, he said no. They bounced it around the ASI teams and the FSDO manager because they were all less than certain, based on the fact they were having difficulty finding any policy or guidance on it. When he looked in CFR 119.1, it looked like the operations could be conducted under the aerial photography exception and they all pretty much concurred within the FSDO office that that was the case.

Asked whether he sought any counsel from legal sources in the FAA outside the FSDO office, he said no. Communication occurred among the inspectors, including Mancuso, and with Mr. Kaskovich’s front-line manager. He might have communicated with his front-line manager about it via messaging. He made a query about what the manager thought of the flights being conducted under Part 91. Then the harness came up and what rules there were for that. They all agreed that the only rule they had was the seatbelt rule, the requirement to wear seatbelts during takeoff and landing.

Asked whether anyone in the office had seen this type of flight operation before, he said they had heard there was a precedent in the industry, that the harnessed aerial photography flights were

being done. Asked if he was aware it was being done elsewhere in the US, he said only from the FlyNYON website, where the company touted their other locations. The FSDO was unaware of any other operators that were doing these flights.

Mr. Kaskovich was asked if he had ever seen any Liberty helicopters being used for a FlyNYON flight and he said no. Liberty had only recently begun the operations and he had not seen the operator since. He did not know the exact month, but he thought they had begun them in late fall 2017, maybe in December or January. Asked whether there was surveillance of Liberty between December or January and the time of the accident he said no. Asked if there had been any SAS surveillance during that time, he said that the last SAS surveillance was probably right before Liberty began these types of operations.

They would not have seen FlyNYON operations because they were conducted under Part 91 which did not mandate surveillance like Part 135 did. Asked if there was anything that would prevent him from looking at the operations, he said no. There was nothing stopping him. Asked if he had considered it, he said that when they were discussing it, the two airworthiness inspectors went and looked at the harnesses, but he did not feel “compelled” to go do so. It was around the timeframe that Mr. Tramontana had made the verbal request to him, probably November or December.

The airworthiness inspectors came back and told him they had looked at it and they were avoiding any specific evaluation because there was no rule policy or guidance that would provide any inspector with what the standard should be during a surveillance or inspection. For example, when they went out and looked at the harness, there was no FAA standard for what was a good harness or a safe harness. As far as they were aware, there was none, nor was there a requirement for one. The airworthiness inspectors had looked at the aircraft and the harness system. Mr. Mancuso could provide details.

Asked whether the airworthiness inspectors had had any concerns about the operation, he said he did not recall them expressing any concerns. Asked whether they had advised him that the pilots were responsible for tethering and harnessing the passengers he said they did not advise him of any procedures. It was his understanding that the operation was conducted under Part 91. When he looked up the Farmingdale inspectors’ comments about the accident in PTRS, it said the flight was a Liberty helicopter operating under Part 91 and that was his understanding based on conversations with Mr. Tramontana.

Asked if the operations were performed under the LOA Liberty had with the FAA, he said that in their initial conversation, Mr. Tramontana was leaning more toward the 119.1 exception which allowed for aerial photography “essentially without anything.” It did not require an operating certificate under Part 119. Those operations could be conducted for hire without a 119 certificate. Asked how he knew they were performing these flights within the scope of the exception, he said that he did not know with certainty. There was a burden upon the operator to conduct the operations within the scope of the rule they were proposing the operation under. If an operator did not do that hopefully the FAA would find out about it and do something about it. Asked whether, in the five months that Liberty had been operating the FlyNYON flights, there had been any FAA verification validating what they had heard from Liberty, he said no. Asked whether

there was anything that would have prevented him from going out and looking at the operation, he said it was not required under Part 91. It did not require any type of surveillance or verification.

Mr. Kaskovich said that an LOA under 91.447 was just that. The FAA was authorizing something. It was a written authorization with conditions that had to be met, and it was signed by the administrator. For the aerial photo flights on the other hand, the requirement for the FAA to verify anything was less than even the LOA would be, because there was no LOA specifying any requirements or standards. For example, if he was to go look at harnesses used under Part 135 there would be something in the operator's GOM and in their training manual – an approval, a request process, an authorization process. Under Part 91 that did not exist.

He did not know under what authorization they would go out and inspect or surveil the aerial photo flights. If he looked at the harness and tried to determine if it was safe or unsafe, he did not know what standard would be used to make that decision. He did not know how he or the FAA would make a determination as to whether it was safe or unsafe, or whether it was “quick release” or not. They had no rule or policy at their disposal to effectively ensure safety.

Asked if the 8900.1 addressed surveillance of a Part 91 operator, he said there was something, but he was not sure of the details. There would be something about a base inspection for a 91 operator. Asked about a ramp inspection, he said there would be something on that as well. Asked if verification of airman certificates would be covered, he said “sure.” Asked if he did any ramp inspection or airman certificate inspections or base inspections for Liberty under part 91 he said no. Asked to confirm whether Liberty were operating the flights under Part 91.147 or the 119.1 exception, he said that it was his understanding that they were operating them under the 119.1 exception.

Asked if he ever talked with any of the Liberty pilots or line crew he said yes, he made a habit of attending their training sessions. He would chat with them during breaks. He interacted with the line pilots. Asked if the Liberty line pilots had ever expressed any concerns to him about the operation he said no. Asked if he had had the opportunity to interact with NYONair pilots he said no. He had never interacted with NYONair ever.

Asked to describe the safety culture at Liberty, he said in general he had always been very comfortable with their safety culture. Most of his interaction was with Mr. Tramontana and in him he sensed a dedication to safety and a willingness to comply with FAA rules and policies. Mr. Tramontana had always been forthright about everything. The Liberty training had always been exceptional. Pretty much any time he did an inspection there he always thanked the Liberty pilots for conducting their operations safely, so he thought that Liberty's safety culture was good. Their operations were challenging with the type of sightseeing operations they did because of the frequent takeoffs and landings and the high-density airspace, and he thought they had managed the challenges well for the most part.

Asked to name of the safety officer at Liberty he said he did not know. He did not believe Liberty had a safety manual. Asked which Liberty managers were involved in safety management, he said Mr. Tramontana was directly involved with safety oversight. Asked who

the manager responsible for managing safety programs was at Liberty, he said “probably the DO.” Asked if that was the DO he never saw, he said yes. He said he would have to look at the GOM to be sure. Asked when he last looked at the GOM, he said he looked at it regularly for revisions, but not in its entirety every time.

Asked if he believed that Liberty’s operation of the FlyNYON flights constituted a significant change in the way Liberty was operating its aircraft, he said yes, with respect to the use of the harnesses. Asked if anything in FAA guidance would have directed him to review those harnesses if they were a significant change, he said that if he thought the operations were being conducted under Part 135 they would have gotten more attention, but under the premise that it was Part 91, no.

Asked if he ever considered just going out and looking at the operation from a curiosity standpoint, he said yes. Asked why he did not do so, he said that regretfully they were forced to prioritize within the office and the FAA. Even the way that the SAS system was structured, the primary focus and attention was on air carrier operations and Part 135 operations, with 91 being near non-existent as far as a prioritized mandate to surveil or inspect. On any given day the workload was so high that they had to stick with the highest-priority items. Part 135 and on-demand that was not Part 135 required quick attention. However, an inspector would “absolutely” like to go out and look at other things.

Asked whether SAS was risk-based, he said yes, for Part 135. Asked whether he believed the FlyNYON flights constituted a risk for the operator he said “worded that way yes.” It did within the scope of all the operations they were conducting. However, the exception allowed a Part 135 operator or non-135 to step outside the operating rules that governed their operations and conduct operations under Part 91 that were far less regulated.

Asked whether crew scheduling and the maintenance of Liberty’s aircraft could be influenced by the Part 91 operations, he said “absolutely.” Asked whether, in that context, there would be some responsibility to determine if the 91 operation was not creating greater risk for the 135 side, he said he could not answer that precisely. While there was an elevated risk, how elevated was a question. There was a certain burden on the operator to self-comply. The FAA depended on that a lot. They had rules and performed inspections, but they were not present all the time. In this scenario with Liberty and the FlyNYON operations, he was comfortable that they would self-comply.

Asked if he had performed any surveillance of Liberty since the accident, he said not yet, but he had not been included in the investigative process. He presumed that once the dust settled there would be a strategy implemented. Asked whether there was anything the FAA was considering doing outside the investigative process, he said the FAA had issued an emergency order ceasing the operation which eliminated the need to surveil it. No actions were planned under SAS since they had eliminated the activity.

Asked whether, in retrospect, based on what had been reported in the news about the accident, he had any opinions about what requirements or surveillance should be in place for these kinds of harnessed aerial photography flights, he said yes. His opinion well before the accident was that

most operations carrying passengers for hire should be more tightly regulated and controlled. There should be more rules, more policy, and more guidance to provide the proper tools to potential operators and those that oversaw them to safely conduct operations. He thought the emergency order was “retro-wise” an effort to do that. It was starting what he hoped would be a process of enhancing safety.

Asked whether he or his office had been subjected to any pressures, political or otherwise, to accept the new type of operation without too much scrutiny, he said they could not accept the operation because there was no formal authorization or approval for the operation that was proposed, however there had been no pressure.

Asked how long he had been the POI for Liberty, he said since 2013. Asked how long a typical SAS visit took for an operator like Liberty, he said 2-4 hours for him. That addressed operations only. Asked what the operators normally did to accommodate the inspections, he said FAA guidance was to try to accomplish them without interrupting operations. He would give them a heads up in advance and coordinate.

Asked about his workload, he said the FAA was having trouble recruiting and retaining operations inspectors. As a result, many FSDOs were somewhat understaffed if not worse. That had resulted in a dramatic workload increase and it became difficult to prioritize, but they always tried to do so within the scope of the guidance and he thought they did a fairly good job of it despite being shorthanded. Asked if he was unable to conduct surveillance because they were shorthanded, he said yes, for Part 91 operations. Organizationally, the FAA deprioritized such operations. It was specified in the work order put out by headquarters.

Asked if he ever asked for overtime, he said that was pretty much impossible to get any more. There was a blanket order not to try. It was not happening.

Asked for his opinion of these types of aerial photo flights when he first learned about them, he said he had read up on the operations online. He saw that they used harnesses and tethers, but he did not know the details of the connections. He was not that concerned because, at a glance, he presumed that such connections or harnesses were such that you could get them off. Asked whether, when Mr. Tramontana explained the operations, passenger egress issues were on his mind, he said that the first thing that went through his mind was rules, policy, and guidance. He asked Mr. Tramontana to assure him that Liberty would comply with the rule that said people would have their certificated seatbelts on during takeoff and landing to comply with 14 CFR Part 91.107 or whatever the rule was pertaining to that.

Asked whether he ever went out and checked to see that passengers did have their seatbelts on during takeoff and landing, he said no, that would fall under operator self-compliance. The operator knew the requirement. The inspectors did not go out and check that the seatbelts were fastened during takeoff and landing. They did in Part 135, however. In Part 135 they also checked briefing cards and how things were emphasized, but not in this scenario. He had just asked if the passengers would be wearing their regular seatbelts during takeoff and landing and he had been told yes. There was no rule about harnesses. He did not go out and verify in person.

Asked if there were requirements about briefing passengers, he said yes. He could not recall if they talked about the briefings or not. Liberty had always been very good about that and they were certainly aware of it as an operator. He was not sure he had specifically addressed that with them in conversation.

Mr. Kaskovich was asked how long he had been out on family medical leave and he said about 2.5 weeks. He was still taking a day or two when he needed to. Asked if there was a process for someone to pick up his workload when he was out he said no. That was one of the problems with the inspector shortage. A GS14 had an assistant, but most other inspectors did not. If they were out of the office, things just waited for them.

Mr. Kaskovich was asked if Mr. Tramontana had ever come to him and told him they were doing FlyNYON flights under Part 135, and Mr. Kaskovich said no, because if Mr. Tramontana had done so, things would have been very different. There would have been a written request, and he would have required that procedures and policies for the operation were included in the GOM and the training manual, and the FAA would have been coming out there. They would have had the same challenge evaluating the harness, but under Part 135 there would have been a request for an approval authorization and a process for the FAA to not approve the harness. The FAA thought they were conducting the flights under Part 91.

Asked what he had to do in addition to SAS inspections once a year for five Part 135 certificates, he said they had corporate operators they oversaw. They did not do surveillance on them, but they did have management tasks such as operating authorizations and special nav authorizations that could be demanding of an inspector's time. There were a number of on-demand tasks that demanded an inspector's time. SAS surveillance was not the biggest draw on it. They did a lot more in a FSDO GA office than just Part 135 oversight. They did so many other tasks that were demanding of their time.

With respect to Liberty's oversight and surveillance, and whether they were able to complete their work plan requirements during each quarter or annually, he said sometimes they fell behind on total work hours and slid an operator to the next quarter if necessary. Asked if there were any non-resourced surveillance items for Liberty at present, he said no. Liberty was scheduled for a SAS inspection in the last quarter of 2018.

Asked about sliding items into the next quarter and whether there was elevated risk associated with that, he said they did consider that before they slid them – whether there would be a big safety impact. Asked how he would know if there would be a big safety impact he said he did not know. There was an obvious risk in doing it. How much risk depended on how well they knew the operator and its type of operations. Asked whether for SAS items that got moved to the next quarter, as part of the evaluation for risk, whether a physical visit to the operator was necessary, he said no, it was their ongoing knowledge of the operator from previous visits and surveillance and knowledge of their operations that facilitated the evaluation. There was an exposure to that.

Asked whether there was anything that would prevent him from inquiring further if he saw something he considered unsafe, he said no. Asked whether he had obtained additional information when he learned about the FlyNYON flights, he said he had only obtained the

information provided by the airworthiness inspectors. He did not feel compelled to go out and look at the operation himself. Asked whether he did not feel compelled because the PMIs did not have any concerns, he said he did not feel compelled because he was comfortable that the operation could be conducted safely.

Mr. Kaskovich said that the FSDO had six operations inspectors.

Asked to define the harness issue, he said what jumped out at him about the retention harnesses was a question about what safety standard existed, what published safety standard, that defined what a safe harness was or was not and how an inspector would determine that. After the accident the term “quick release” was “thrown around a lot.” How quick a release, he wanted to know, would one want, because one could go from one extreme to another. Too accessible a quick release could create a new hazard. As an example, a tourist who had a couple of beers could pop the quick release. The question about what standard should be used to evaluate the safety of the retention harnesses remained his concern.

Asked if he had seen the tethers Liberty was using, he said he considered that a part of the retention harness. There was a certain amount of expectation that the operator accepted their responsibility to operate safely. Without having seen the harnesses, he knew that a person had to put the harness on, and when they exited the helicopter at end of the flight they had to take it off. It had to come off or they would be forever wearing them. This brought him back to what was the standard for how easy it was to get it off, what was meant by “quick.”

Asked whether SAS inspections were all he did when surveilling Liberty, he said he did check airman observations with Mr. Tramontana. When he did those observations, they reflected upon a broad spectrum of the operation – Liberty’s compliance with their GOM, with procedures, and with standards. Often a check airman authorization would bring them back to a review of the GOM. He might, for an example, see a breakdown of performance of a checklist. That might raise a question about the GOM, so he might go back and review that with Mr. Tramontana to look at the procedure for the checklist, or the operator’s policy on the use of a checklist. Check rides reached beyond what was observed in the helicopter. A check ride might lead to an examination of the training program. During a Part 135 check ride, the pilot had to give him a passenger briefing. If it was poor, he would have to look back at the operator’s training and manuals. Check rides had a broad impact on an inspector’s analysis of the operation.

Asked if he also approved manual changes, he said yes, he approved changes to the GOM and training program. If the aerial photo flights had been conducted under Part 135, there would have been a requirement for more defined policies in Liberty’s GOM and training program for how it could be done more safely and there would have been a process to not approve the proposal.

Asked for his general guidance for safe emergency landing areas when flying in New York City, he said that was a broad question. Asked about emergency landings for FlyNYON type flights over New York City, he said the general thought would be that in the event of engine loss a pilot could land the helicopter without damage to persons and property on the ground. One would select one’s landing site with consideration to avoiding damage to persons and property. He did not know what one would be looking for beyond that. Asked whether he would advise a pilot to

use the river as a landing area, he said he would never tell a pilot where they should go. Asked whether he would personally land on the river, he said it would depend on what else was available to him.

Asked whether Part 135 helicopter pilots had to undergo IFR checks, he said that if Part 135 ops specs specified that yes, but the checks the pilots underwent were VFR checks. Asked if he did any check rides of Liberty pilots during the period they were operating FlyNYON flights, he said he could not recall. Asked if he would have recalled it if he had done one on a FlyNYON flight, he said yes. He had never been on a FlyNYON flight or had anything to do with them. He had had no contact with FlyNYON at all.

Asked if he had any other information to share that he had not been asked about that he thought might be relevant to the investigation he said no.

The interview concluded at 0950.

16.0 Interviewee: Thomas Mancuso, Liberty Helicopter PMI

Representative: Matt Smith, FAA

Date / Time: March 29, 2018 / 1007 EDT

Location: TEB FSDO Offices

Present: David Lawrence, Van McKenny, Bill Bramble, Emily Gibson – NTSB; Bob Hendrickson – FAA; Paul Tramontana – Liberty Helicopters; Brian Rosenberg - NYONair

During the interview, Mr. Mancuso stated the following:

His name was Thomas Andrew Mancuso, and he was 43 years old. His title was principal maintenance inspector (PMI). He was PMI for the Liberty 135 certificate.

His background included being in aviation pretty much all his life. He started as line guy, working his way up to director of maintenance (DOM) for two part 135 companies. He also worked for Continental Airlines in the engine buildup unit. He joined the FAA in 2006, initially as an ASI. He had been the PMI for Liberty for 7 or 8 years. The PMI before him was Fred Grill, who was retired. He did not know why the certificate changed at that time.

His current certificates included an A&P mechanic with an IA, and held a private pilot multi-engine instrument pilot rating. He did not currently fly.

When asked about the organizational structure in the FSDO, he said there were about 25 people in the office, and he answered to his front-line manager (FLM). The FLM answered to the office manager.

There were 3 total inspectors on Liberty certificate, the POI, PMI, and PAI. They communicated regularly regarding all the certificates they managed, pretty much on a daily basis depending on the certificate. He had about 20 certificates he managed. The breakdown was about ten 135 certificates and ten 145 certificates.

His role as PMI included certificate management. They used the SAS, or safety assurance system, as their workflow. He also did regular surveillance, accident investigation, and general duties.

He learned of the accident through the news. He had no idea who was actually involved. When he found out it was Liberty, he spoke to other principals and his FLM. They then waited for information. At first, they thought the Farmingdale FSDO was going to handle the accident.

He did not know the pilot.

Since the accident, he had not reviewed any records for the accident helicopter.

When asked what guidance he used to conduct his job, he said he used the 8900, federal regulations, and federal notices and orders.

When asked to describe Liberty, he said it was a 135 helicopter charter company. They also held an LOA for sightseeing. His primary contact with Liberty was director of maintenance, Rodrigo Goncalvez. The last communication before accident was probably a couple weeks before. He said they communicated “quite regularly,” and there was always some sort of interaction going on. It typically related to maintenance, conformity inspection, updates to the manual, MEL questions, and things of that nature.

Asked if he was aware that Liberty was operating part 91 flights for NYONair, he said yes. He learned about it roughly around October 31, 2017. They found out during a routine surveillance visit to Liberty. He could not recall what the surveillance module was, but it was scheduled routine surveillance through their SAS system, and based on a work plan item they were completing. They observed what they came to find out later was FlyNYON, and saw passengers being walked out to helicopters in harnesses. They asked, “what exactly is that,” and that was when they learned about the whole process. Up to that point, they were not aware Liberty was doing the FlyNYON flights. The PAI was with him.

When he returned to the FSDO, he informed the POI of their observations. The POI was not aware that Liberty was flying FlyNYON flights either. Asked if that was the first time FAA was made aware Liberty was flying FlyNYON flights, he said it was the first time he and other principals on the certificate were aware, yes.

Asked what he observed on the visit, he said they observed it from the FlyNYON section since they had a little office in hangar. He noticed the employees walking out passengers in harnesses and carrying cameras. That’s when they asked what was going on. They explained the whole process, that it was a sightseeing photo flight with doors off and the passengers were wearing the restraints for the flight. That was when they learned the passengers would be sitting on the floor and whatnot.

Once they learned about that, they started to dig deeper and see exactly what was going on. They requested to see the helicopter, and where the harnesses would be connected to the aircraft, and

began to ask all the pertinent questions they thought were necessary. When asked what the pertinent questions they asked were, he said they asked where the harnesses were attached to and if they were permanently installed on the aircraft, and what the load rating was on the attach point. He said he had many questions, including concern about passengers interfering with controls, or whatnot.

When asked what the answers were to those questions, he said the harnesses and lanyards that were equivalent to mountain climbing harnesses attached to hard points on the helicopter, and the Liberty DOM provided him with the maintenance manual with load bearing capacities of the attach points. He was assured there was no concern that the passengers would interfere with the controls. When asked who told him that, he said Mr. Tramontana.

The harnesses and lanyards were not permanently installed on the aircraft and were not part of the aircraft. The attach point limitations were in the manuals, but not the harness or tether information.

When asked if he had any other concerns during visit, he said he was concerned with the whole operation; it was something very new to him, and he had never seen anything like that before. They voiced their opinions to Liberty, and then when they came back to office, they voiced their opinions to the POI and their management.

When asked what opinions he expressed, he said that he told them he did not know if this was such a great idea. When asked why, he said "it seemed like a very unorthodox situation."

He said they discussed it quite in depth with the POI and management, and they looked through the regulations to see if there was anything Liberty was doing that was contrary to the regulations. When asked what their conclusions were, he said they could find nothing contrary to the CFRs.

When asked if any of those types of flights would be subject to surveillance by him, he said no because they were a part 91 operation. When asked if he was allowed to conduct surveillance on a part 91 operation, he said you were are allowed, and it could include ramp inspections and things of that nature.

When asked if, following learning of the Liberty flights, if the FAA conducted any ramp inspections on the Liberty flights, he said no because it was not a standard thing. The times they were there, there may not have been any of those flights going out. When asked how many times he had been to Liberty after they learned of the flights, and he said he could not recall exactly. When asked if those visits would have been SAS related work elements, he said no, not necessarily, and they could have had a conformity inspection somewhere in that timeframe.

When asked how many times he had been to Liberty since learning of the flights, he said it was possibly less than 5 times.

He had not previously heard of NYONair before seeing the operation on their visit in 2017. When asked if anybody from his office contacted NYONair to find out additional information on the operation and its relation to Liberty, he said not to his knowledge.

When asked if under the SAS surveillance program, was a risk analysis incorporated in surveillance, he said yes, there was a CHAT, which was where you make your risk assessment. He had done that himself for Liberty before.

When asked if any risk assessment was done for Liberty following learning of the FlyNYON flights, he said “I increased the risk assessment.” When asked why, he said “because I felt this was something that would need to be monitored or watched.” When asked what that did, he said there were a lot of different choices you could choose from – from increasing surveillance or shortening the timing of surveillance. When asked what surveillance would be increased, he said he said just the modules in SAS; ground station operations, technical operations, managerial operations and such.

When asked if increasing surveillance triggered a notification to his FLM, he said he did not know if it triggered any direct alert to management. FLMs had to resource the surveillance, so they would see it that way, but he did not know if management would see that as a red-flag. When asked how the FLM would know he had increased surveillance, he said through meetings. When asked if there were meetings held to discuss Liberty’s FlyNYON flights, he said yes, and they voiced their concerns and what they thought. They went through regulations but found no mechanism to change anything.

When asked if the POI did any increased surveillance or entered anything in SAS, he said he did not know. When asked what entering something into SAS would get an inspector, and what did the computer provide to the inspector, he said you could manipulate it yourself; add or remove things. He was not aware if it would provide the inspector with a specific surveillance activity.

When asked what he saw regarding the harnesses tether system, and his concerns, he said he did have concerns that there was no sort of real approval of the system. One of the questions they asked was how do they know the tensile strength of the lanyards, how are they inspected and entered into some kind of tracking program. They were concerned with egress of the harnesses and just in general having passengers moving about the cabin with the doors off.

When asked what responses he got, he said they knew the tensile strength. The harnesses were brand new, and they were monitoring and inspecting them for fraying, cuts, and abrasions. They were providing the passengers with a safety briefing video. They had included the cutaway knives on the harnesses.

When asked if he ever saw the FlyNYON passenger briefing video, he said no. Asked when told they were monitoring the fraying, did they show any program or paperwork to validate that, he said no. When asked if he saw the cutaway knives, he said they were attached to the harnesses, and they were in their sheath. He did not pull them out to look at them.

When asked if he saw the attach points in the helicopter, he said yes, they were close enough to the helicopter, and they also took pictures of the carabiners and attach points in the rear seats, but could not remember if he took pictures of the front seat attach points.

When asked if he had any concerns about front passenger tethers and proximity to fuel cutoff switch he said not at that time, no more than the rear passengers. The rear passengers could be in proximity to the fuel cutoff switch, depending on the configuration of the helicopters. The helicopter he saw was a B-2, but some had different modifications, and the one he saw had the controls on the left side, right near the door section. When asked if he was aware someone would be configured with a tether, and if that prompted concern of the tether proximity to fuel cutoff in other helicopters, he said no more concerned than the first helicopter he looked at.

He voiced his concerns to Mr. Tramontana and the DOM, specifically with regards to the rear passengers, and was told that the tether was not long enough for them to interfere with the controls.

When asked if he was aware of any risk assessment done on the operation of these FlyNYON flights, he said not that he was aware of.

When asked if he was aware of any Liberty or NYONair demonstration of an evacuation of passengers while in the harness system and attached to the aircraft, he said not that he was aware of.

When asked how his 2017 visit was documented in SAS, he said through DCTs. They then went into triple A, so your findings were reviewed by management. Management would then send it back for him to do a final assessment of what needed to be done. When asked what the end product was, he said that since they were part 91 flights, these flights were not part of SAS, and SAS had no mechanism for that kind of inspection.

When asked how he would record a ramp inspection on a part 91 operation, he said it would go through PTRS. When asked if they had done any additional ramp inspections on Liberty after they found out about the FlyNYON flights, he said specifically for the part 91 flights, no. When asked why not, he said that you did not know where and when the flights were going to take place, and they were a constant thing.

When asked if there was anything preventing him from doing a spot inspection, he said no, but he would only be there to look at maintenance issues. When asked if a ramp check could be part of that, he said yes, but most of the time he inspect the aircraft, it was sitting there empty, but there was nothing preventing him from doing that.

When asked if there were any follow-up surveillance activities on Liberty, he said he performed a scheduled inspection this past Monday on ground station operations. When asked if he had any ongoing concerns regarding Liberty maintenance, he said no. He understood that since the accident, Liberty was doing a complete audit of their records.

When asked to clarify what controls were on the left by the door, he said the cyclic on left side, but could not remember the others. He believed the fuel control on the B2's was in the same location on the floor, but could not specifically remember the one he saw during the visit.

He said the question he asked was if they had any concern a passenger might be able to touch or bump into those controls, the pilot controls in general.

When asked if he or his office was under any pressure, political or otherwise, to not object to or dig into further or accept this type of operation, he said not that he was aware of, but that would be above his knowledge.

When asked if he felt his personal safety concerns were adequately addressed pertaining to the FlyNYON flights, he said no, but that was because there was no mechanism to address them.

When asked if he did need to bring a safety issue that was not adequately addressed by existing FAA regulations policy or guidance, what would be the mechanism to do that, he said he would then speak to his management, which he did.

When asked if he considered their response as adequate, he said yes because they went through the regulations, and everything they could possibly gather, and there was nothing contrary to the regulations. He was still concerned, but it was a personal concern.

He said for issues not covered by the regulations, he would still go to his management. When asked if he did his personal due diligence, raised the issue to management, and a decision was rendered and resolved as far as the FAA was concerned, he said yes. He believed they did their due diligence, it was discussed, and he felt it was adequate. He felt they had looked though the entire process and saw nothing contrary to the regulations. He did not know what the FAA was going to do to finalize the issue, and that was above him. He was not aware of any additional efforts by the FAA to look further into the issue.

When asked if his workload allowed him to complete all his tasks, he said yes, and he tried to stay on top of his workload the best he could. When asked if he received overtime, he said no, they do not get overtime. His schedule was an 8-hour day, five days per week standard shift.

The CHAT tool would give him a list of things that would be a safety concern, like a company with financial trouble, high turnover, or complex environment it operated in. By selecting those questions, they could get a gauge of how high or low a company's risk assessment was, and you could pick things to mitigate those risks. That was fed into the SAS system, and provided grades in the risk. He said it was a complicated system. It could result in increased surveillance, or they could move the surveillance back to be accomplished sooner. For Liberty, when he raised their risk level, he pulled back some of the scheduled inspections, or customize the DCT's to do the surveillance.

He said when he raised their risk level for Liberty, he pulled back some of their scheduled inspections. They had general items to do in first quarter of 2017, had some due in the 3rd quarter that were moved back to second quarter. When asked which inspections he was going to perform in the second quarter that had changed, he said there was nothing scheduled for 2nd

quarter, and the ground station operations inspection was pulled back from 3rd to 2nd quarter. That inspection consisted of a litany of things. When they were doing their normal surveillance, they would look at things to include the cabin.

When asked if there were any concern with removal of doors, he said no, it was permitted in the AFM. With regards to the seat cushion removal, they spoke to a tech rep at Airbus and they said they had no position since it was not a part of the crashworthiness of the seat. The AFM stated that with doors off, seat cushions should be removed on any unoccupied seat.

When asked how many airworthiness inspectors reported to him, he said none, and he worked by himself since an assistant he had passed away in December.

FlyNYON flights with the doors off would not require a conformity check.

When asked if anyone at Liberty ever came to him with a safety concern about these types of flights, he said no.

He said the floats on the aircraft were subject to inspection through a records check, which was part of his checklist. He would check to see that the float inspections were complete. He did not know off the top of his head how often the Apical DART inspections were required.

When asked if they ever sought guidance outside his office about their concerns with the FlyNYON flights after approaching management, he said he was not sure if management did, and was not aware of it. When asked if there were avenues available to him if he felt management did not do their due diligence with regards to their safety concerns, he said he assumed there were ways to escalate it, but would have to see what the protocols were.

He said the harnesses were not FAA approved in any way.

When asked if he saw an operational safety concern, would he address it despite not being strictly airworthiness, he said absolutely, and when they came back to the office, they immediately reported it to the POI.

During a ramp inspection, they could look at the maintenance records on the aircraft, and did that regularly. At the time of the accident, there were no non-resourced items awaiting inspections.

When asked if there was anything in his guidance or authority that, after seeing the FlyNYON operation, allowed him to stop the operation while they obtained clarification of the operation, he said no, it was not contrary to the regulations.

When asked if Liberty provided them a schedule of their operations, he said no, they conducted their work regardless of how many helicopters were there.

When asked if there was anything more he wanted to add to assist the investigation, he said not that he could think of.

Interview concluded at 1113.

17.0 Interviewee: Anthony Benjamin Pascoe, Former Liberty Helicopters Director of Safety

Representative: Declined

Date / Time: April 10, 2018 / 1530 EDT

Location: Via telephone

Present: Bill Bramble, David Lawrence – NTSB

During the interview, Mr. Pascoe stated the following:

He was 39 years old. His current position was pilot with Boston Medflight, and he was based at Mansfield Base (1B9). He was flying the EC-145, and the company also had an S-76 and a Bolkow Bk-117. They would soon receive three H-145's.

He held a commercial instrument certificate and used to hold a CFI and CFII years ago. He had taken the ground test for the ATP but not the exam. His total time was all rotor time with no fixed wing time, and he estimated his total time at 4,700 hours. He had also flown the A-350, A-355, AS-365, and R-22.

He used to be employed at Liberty, and his date of hire was around June 2008. He held the positions of line pilot, safety officer, and Director of Safety. He became a safety officer about 2013, the one and half years later he became the Director of Safety and he remained in that role for his remaining three years at Liberty.

He said that his boss was Paul Tramontana but he also reported to the CEO Chris Vellios in both his line pilot and director of safety capacities. He said the CEO Chris Vellios was very accessible. He said Mr. Vellios might have been the COO rather than the CEO, but he was the chief as far as being around the base, and the highest up there. He was the one he reported to.

When asked if anyone reported to him, he said no. John Simone was another safety officer at Liberty, and they collaborated and communicated, but John did not report to him. Preceding him as Director of Safety was Mike Ciesli (spelling uncertain), who left the position for a position with another company. He thought Mr. Ciesli had been the previous director for about three years but he was not sure how long.

When asked about his responsibilities and activities as director of safety, he said they mainly involved organizing quarterly safety briefings, which he would lead via powerpoint. He also signed pilots up for some type of safety course, generally online to be done for the safety briefings. These courses frequently came from the FAA safety website and were online active courses. He oversaw life vests on the tour side. The life vests were kept downtown, and he had to inventory those each month for inspection dates and to make sure nothing was broken. Towards his last three months, he started taking inventory of the life vests in the aircraft.

He was part of the training crew for the loaders, who were customer services folks at the downtown airport, and each quarter he would go over safety procedures and drills with the loaders and pilots. He was also tasked with updating the safety manual, which he did a few times.

When asked where he obtained guidance for fulfilling his responsibilities as director of safety, he said he learned from the previous director of safety, with whom he worked as a safety officer for about one and a half years. He learned the position from him. Liberty also sent him to courses at HAI a few times, including an FMS course and a human factors course.

When asked the origin of Liberty's safety manual, he said he did not know where it originally came from; either from an outside source or in-house. It was already in place when he started working for the company. Revisions mainly involved documenting staff changes with their names and phone numbers, and he changed out some things that were not relevant to their operations. He was tasked with updating it and making revisions when he first came on. He had done the revisions save one, and John may have done one of them. The revisions he was responsible for started in 2015. He most likely did all the revisions listed in the current manual.

When asked how the safety manual was utilized, he said it was a general outline for the procedures they had in place. They had a very good informal system where pilots were able to come and talk and not worry about repercussions. They also had the formal system in place, which involved an online system he encouraged pilots to use to report issues, but mainly they were encouraged to come to him directly. When asked if the quarterly pilot safety meetings were held regularly, he said yes. Those were the primary means to report safety issues.

When asked how he would go about identifying safety-related hazards in Liberty flight operations, he said he kept a file on them, and they included a number of different things like close calls with another operator in the air. He could not remember other issues he had identified. When asked if he had advocated for safety improvements, he said they tackled things as they came in, but nothing glaring came to mind for now.

Updating the safety manual was the director of safety's responsibility.

When asked what high-level manager or executive was principally responsible for managing safety at Liberty, he said he considered Paul his boss, and he worked under his guidance. Mr. Pascoe said he approached safety as everyone's responsibility and involvement, from the top down. Asked who the person at the top was for managing safety and serving as an accountable executive, he said Chris Vellios was the top. He reported to Mr. Vellios a few times, but he mainly reported to Paul who was his direct boss. Drew Schaefer was the owner of the company, so he was the top, but for running the operation it would be Chris Vellios.

When asked if that changed over time, he said yes it did. When he first started at Liberty, there was someone who was there for a few years, and Mr. Vellios was in another capacity before moving into the COO position. That had occurred about 2011.

When asked about Chris Vellios's LinkedIn page which stated that Mr. Vellios had "led charge to create a culture of safety" at Liberty, Mr. Pascoe said he did not feel like Mr. Vellios had promoted a culture of safety at Liberty. He said he really did not interact with Mr. Vellios daily, but he felt the narrative on Mr. Vellios's LinkedIn page was accurate.

When asked to describe the role of the COO in safety management, he said like any manager, Mr. Vellios was not involved in the day-to-day operations, but everyone reported to him. It was a normal management position. Asked whether the COO gave him steering currents on running the safety program, he said no, he got his training as director of safety from Liberty's previous director of safety.

Asked whether he felt the COO supported him when he had to make difficult safety calls, he said yes. An example of Mr. Vellios's commitment to safety was when he sent him to various safety courses. He was committed to the safety of the New York operations. He thought Chris would support him in any safety call, as would Paul.

When asked about the role of the DO in safety management, he said the DO was Paul's boss, and as he understood it, the hierarchy went from Chris down to Pat Day and then to Paul. When asked about his interactions with the DO, he said he did not have a daily interaction with Pat Day since Pat was on the business side of things and Mr. Pascoe did not see much of what went on behind the business side. He said his interaction with DO was limited. When asked what role the DO played in safety or the safety program, he said he would occasionally come in during the quarterly briefs to go over topics and he would give advice to the pilots. As far as hands-on with the safety manual, that was not Pat's role but it was the director of safety's role.

When asked about the role of the chief pilot in safety management, he said the chief pilot was his boss, and he seemed always there and always accessible. He was involved in day-to-day operations, and he was the person Mr. Pascoe would turn to with questions or for advice. He was very hands-on.

When asked about the role of Patrick Kevin Day at Liberty Helicopters, he said that his title was director of charter and marketing. He was the boss of the dispatchers for the charter side of the business. Asked how his role evolved over time, he said Patrick Kevin Day was a pilot who flew in the early days, but very little before focusing on the charter side. Patrick Kevin Day still had the charter and marketing position when Mr. Pascoe left Liberty, and he was instrumental in getting the Blade business going for Liberty. He was the one who was out promoting the business.

When asked about Liberty's relationship with New York on Air or NYONair or FlyNYON during his employment at Liberty, he said that as he understood it, Patrick Kevin Day was part owner of NYONair, but he believed Mr. Day had started it with one other person. They started that company about a year and a half or two years before Mr. Pascoe left Liberty, using a couple of Twin-stars hangared in the same hanger as Liberty. Mr. Day was still in charter and marketing with Liberty at the time, but he was also working on this other project.

When asked how that relationship between Liberty and NYONair changed over time, he said when NYONair they first started they would occasionally hire pilots from Liberty to fly flights on their off time. When NYONair's business ramped up shortly before Mr. Pascoe left, they started hiring Liberty to fly the flights. As NYON business expanded, they had overflow business and they turned to Liberty to complete the flights.

When asked if he ever operated any flights for NYONair, he said he did about a year and a half ago in the Twin Stars. He operated two or three of the flights for aerial photo charters. Flying for NYON involved flying on his off days, and it did not make sense for him to drive the four hours to Liberty on his days off to perform those flights so he stopped doing them. When the NYONair flights became Liberty flights, he was one of the more senior pilots. He was more involved in charter flights and he did not operate the photo flights.

When asked if he had any safety-related concerns about the type of operations conducted by NYONair, he said he did not have any specific concerns, but the general consensus was that they were growing so big and quickly, and moving into uncharted territory, and Liberty personnel were not sure if NYONair had procedures in place on how to do those flights. It was uncharted territory for both NYONair and Liberty. He thought they were beginning to put those procedures in place right before he left Liberty. As far as specific safety concerns, he did not have any. He had heard that NYONair's ground personnel seemed unsure at times. They were typically all new hires and he was not sure what training they received. That was a concern, with the ground crews. Other than that, he had no specific concerns about NYONair. From his perspective they grew really quickly and they were trying to figure out how to do those flights and working out the kinks. He thought they were aware and starting to address those issues when he left Liberty.

When asked if he was aware of any incidents involving potential for conflict between passenger tethers and flight controls, he said he had not heard of any issues specifically. It was always a concern of the A-Stars in any operation with the fuel cutoff placement. By design there was always that potential, but he could not recall anything specific, or any extra considerations for NYONair flights. He did not recall anyone reporting that as a safety issue on Liberty or NYONair flights.

When asked if he was aware of any concerns about the ability for passengers to evacuate a NYONair flights on the ground in an emergency, given the harnesses or tethers, he said no, he had not heard of any issues beforehand. Obviously in hindsight it was a concern. He thought they had come up with a plan with the cutters, but he did not know anything specific about the cutters or the tethers. It sounded like a plan of some sort was in place. It was uncharted territory, and they needed a consensus on how the operation was going to be run in all aspects.

He said NYONair started using Liberty pilots about a month or two before he left Liberty. He remembered Liberty pilots starting to fly them, and it quickly went crazy with the number they were doing. A few months before, he would see one or two flights per week, and when he left Liberty there were five or six per week. NYONair became very popular very quickly and was using Liberty to do more of their flights.

He believed he left Liberty in late August or September 2017. He found a new job that was closer to where he lived. His decision to leave Liberty was family related.

When asked what his perceptions were of the safety culture at Liberty Helicopters, he said he always felt Liberty had a good safety culture. The company had been around a long time before he arrived. It seemed as if a good safety program had been established. He only had to tweak it a little here and there with the revisions. Paul was his direct boss and was a big advocate of safety.

When asked about the fiscal impact New York City's ordinance reducing tour flights out of the lower Manhattan heliport had at Liberty, he said the whole thing started before that. Liberty used to operate on the west side, then the west side and downtown. They had kind of been pushed down and reduced in size and more operators had been pushed into a tighter area which became the Manhattan heliport. For the number of operators and flights that went in and out of there it went remarkably well on safety. On a busy day, helicopters were taking off every 20 seconds. They had had holds at Governors Island with 8 other aircraft all trying to get down there. It was crazy hectic, but they had made it work and it was remarkably safe, due in part to the controllers at the helipad. It was challenging, but it was the best it could be for that many operations. When asked to clarify the impact the reduction in tour operations in New York had on Liberty's bottom line, and if that had required them to take on the NYONair business, he said he could not comment on the business side of Liberty. He was sure it had hurt, because they had started charging more for flights, but there was a lot of business from Blade, which helped. He was sure Liberty took a hit because of the reduction of tour flights in New York, but he was not sure how much of an impact it was.

When asked about his perceptions of the safety culture at NYONair, he said he did not have too much interaction with the NYONair side since they were just starting up and learning their operation. NYONair was working through things, and he did not know what NYONair had set up on their safety side.

When asked about Pat Kevin Day's personality, he said he was likable and outgoing, type A, definitely the entrepreneurial type, and good for drumming up business.

When asked how involved the Liberty DO, Patrick Michael Day, was with their operations, he said he saw the DO a couple of times a week, and he had been in the office more when they were in Linden. As the years went by, he was in the office less and less. He understood Pat Day Senior was the DO, but most of his safety interaction was with chief, not the DO. When asked why, as a Director of Safety, he considered the chief pilot to be his boss, not the DO, he said that he reported to Chris Vellios, but he saw Paul more often. It was a more informal communications route. He did have some direct contact with Chris but he defaulted to going to Paul. Chris was in his office "more often than not" but their schedules differed, so seeing him was "hit-or-miss." Mr. Pascoe worked a 4-on and 4-off schedule whereas Chris was more Monday to Friday.

He clarified that the two or three NYONair flights he had operated were ones in which he was hired directly by NYONair. The flights were for a professional photographer and sometimes a crew of one or two others, not the "shoe-selfie" flights. This was before those kinds of flights came into existence.

He said he had not kept up with many of the Liberty pilots, and none of the Liberty management. He knew Richard Vance, who was at Liberty about a year before he left the company. He could not remember if they flew together. They might have done so coming back from inspecting life vests. He said Richard was a very nice guy, seemed confident, talked well, and knew his information. He never had any bad impressions of Richard or had anyone coming to him with an issue with Richard. He did not have first-hand knowledge of Richards' flying abilities.

When asked how often he saw the FAA observe any operations physically at Liberty, he said he saw them once when Paul was getting an instructor check ride and Mr. Pascoe was the pilot flying. They would occasionally come to Liberty's annual recurrent ground training. They did not attend during the last ground recurrent he attended at Liberty, but they did come the three previous years. He had had some interaction with the POI, having helped go through paperwork with the POI during a visit. Any other interactions he had had with the POI would have been only informal talk, nothing as far as sitting down and conducting an analysis of safety issues.

He said he did not use any NYONair SOPs when he operated the two or three photo flights for them. He was already familiar with the aircraft because they were the same aircraft Liberty used to operate. He had also done photo flights for Liberty before, so he just used Liberty SOPs. He did not recall being provided any NYONair SOPs. For his days off flights, they wanted him to do more, and he said he would stick with the Liberty flying instead. He did not know if NYONair ever had him listed on a part 135 certificate.

When asked if John Simone or any other pilots had expressed safety concerns to him about the NYONair flights after he left Liberty, he said he knew a few pilots who had left. He did not know if it was specifically a NYONair issue. He perceived a consensus that NYONair had come up so quickly and business had boomed so quickly that people there were not sure about their procedures or infrastructure and that might have been a concern as to why guys left. He thought it had been resolved some since then. That was the feeling he had, but he did not know specifically on the NYONair side what they had in place. It was uncharted territory, and things had not been nailed down for those operations.

Asked whether he had any additional information to provide that might be relevant to the investigation that he had not already been asked about he said no.

The interview concluded at 1637.

18.0 Interviewee: John Paul Simone, Former Liberty Helicopter Safety Officer

Representative: Declined

Date / Time: April 16, 2018 / 1000 EDT

Location: Via telephone

Present: Bill Bramble, David Lawrence – NTSB

During the interview, Mr. Simone stated the following:

His name was John Paul Simone, and he was 46 years of age.

His current position was pilot at Heliflite. He held an airline transport pilot certificate for helicopters and he had about 5,200 hours of flight experience. He had experience flying the AS-350, AS-355, and AS-365; Bell 430; R-22 and Sikorsky Schweizer 300.

He had been previously employed by Liberty Helicopters. His date of hire at Liberty was April 2011 and he left the company in January 2018. He was a line pilot there and, in 2014, he was also appointed to the position of safety officer for the pilots on his work schedule or “hitch.”

Asked who he reported to at Liberty as a line pilot and safety officer, he said he reported to Paul Tramontana for both roles, and he said that he knew it was described differently in company manuals. As a safety officer, he was also supposed to report to Chris Vellios, but that was more of a “paperwork thing” to confirm that they were doing the quarterly safety meetings. Mr. Vellios would sign off on those, but as far as direct daily contact, Mr. Simone dealt with Mr. Tramontana. No one at the company reported to Mr. Simone. Mr. Simone oversaw the pilots from a safety aspect, but he was not their supervisor.

Mr. Simone was asked to describe his responsibilities and activities as safety officer. He said the safety officers organized quarterly pilot safety meetings. The meetings were mainly weather-related so it covered seasonal information. They also organized quarterly loader training for the tour flights out of lower Manhattan as well. Those were separate from the quarterly pilot safety meetings. PowerPoint slides were presented at the pilot meetings. Handouts were provided at the loader meetings. Mr. Simone and Liberty’s director of safety, Tony Pascoe, attended the loader meetings. Liberty’s director of training, Brent Duca, sometimes attended them as well.

Asked where he obtained guidance for fulfilling his responsibilities as safety officer, he said mainly he received it from Mr. Pascoe. Mr. Simone said that when he took the safety officer position there “wasn’t really any training, besides I started out assisting Tony with the quarterly meetings.” After that, he began to serve as safety officer for his team.

Asked whether there was a standard format to the quarterly pilot safety meetings, he said they involved a PowerPoint presentation. He and Mr. Pascoe would throw in current topics like lasers, drones, or bird strikes. Leading into summer, they would talk about thunderstorm avoidance. In the winter they would address icing and snow limitations, things like that.

Asked how Liberty’s safety program identified safety-related hazards in the company’s flight operations, he said they mainly identified them through direct contact with pilots. There was an “open-door” policy. Pilots would come to them to discuss any issues. Pilots also had an anonymous online safety reporting form they could fill out if they had any concerns. It automatically sent the report to Mr. Pascoe in an email. Asked if those anonymous reports were reviewed at the quarterly pilot safety meetings, he said he could only remember one report being filed through that means.

Safety concerns that had been noted mainly involved operations at the downtown heliport. They were identified through direction observation. It was very casual. People would not fill out a

report. It was more like, “Did you see so and so in that crazy approach” or “if we could get our hands on that video to demonstrate settling with power” or something like that. There was a lot of casual conversation around 5PM when the tour pilots would come back to the office and sit in the conference room and vent about their day. It was interesting to sit down and listen and give feedback to them. This generated good ideas for the next safety meeting.

Quarterly pilot safety meetings were held on a regular basis when he was at Liberty. They normally held one in January in conjunction with the recurrent training provided by Brent Duca. The other quarterly safety meetings would typically occur around April, July and November.

Asked if he recalled any specific hazards that he or the safety program identified during the time he served as safety officer, he said nothing that stood out. There had been no recurring issues until the doors-off operations recently began. Mr. Simone stated, “That wasn’t really something we had a handle on so to speak.” Cold weather operations were a big concern. There was a lot of effort devoted to coming up with a minimum temperature for those flights, but there had been a lot of pushback. At first, the minimum temperature was 45 degrees, then it was 35 degrees, and when the temperature dropped below 30 degrees the 35-degree limit went out the window as well. The company bought gloves, heated gloves, and masks for the pilots, but he said that eventually, if one put enough gear on a pilot, and they were wearing these big gloves, he wondered how they were supposed to manipulate the controls in the cockpit. That was really a concern. When they had them out there flying and it was 20 degrees outside, then it really became a problem. That really stood out for him. He said, “We were told, just, you’ve got to suck it up, and that’s how it went.”

Prior to the doors off flights, safety aspects were mainly focused on the downtown helicopter tours: the routes, safety of approaches, and weather.

Asked to elaborate on his statement that the doors off tours were “not something they had a handle on”, he said that in mid-2017, Liberty’s stance was that if a photographer called or someone wanted to do a doors off flight, they were to give them NYON’s phone number. Liberty wanted nothing to do with it. Mr. Simone had taken a team up over New York City for Samsung. It was booked as a regular Liberty flight. The passengers were professional photographers who took pictures over the city with Samsung phones that they were advertising. When Mr. Tramontana saw it on YouTube, he said “That’s it. You’re not doing these.” He had a solid stance on not doing doors off flights. They were not to operate doors-off flights ever. Then in mid-2017 it flipped.

Since Mr. Simone started in 2011 they had occasionally done professional shoots over the city and it never was a big deal. They had one or two guys who knew what they were doing in the helicopter. That was how the FlyNYON thing evolved. It changed about September 2017, or perhaps sooner. It was a complete 180. The announcement was made that now Liberty would be handling flights for FlyNYON and they would just book them as if they were a third party. FlyNYON had their own things set up. When Liberty’s stance was no doors off, FlyNYON had their own aircraft.

They did a weekly safety call. Mr. Simone did not know when those calls started, but he used to call in and listen to the meetings. He said FlyNYON did their own thing as far as the safety aspect of it. Down the road, when it really got busy, Scott Fabia and Brent Duca wrote up an SOP for loading and how to handle the passengers. They were not really in-depth because FlyNYON customer service representatives were loading the passengers and securing them and everybody had their own technique. They did an SOP to get everybody on the same page.

Asked whether he advocated for any safety improvements or changes, he said nothing specific stood out. Asked how the safety manual was utilized, he said, "It really wasn't. From my perspective it was not used." He said Mr. Pascoe had revised it but the way they operated in the safety department was already on "cruise control, so to speak." They already had the quarterly meetings and were audited by TOPS in 2016 and everything had been good from their perspective. Asked whether Liberty's operation was kind of stable up until the point where they started doing the FlyNYON flights, in terms of the activities and known risks, he said yes. They had a pretty good team on each hitch; Mr. Simone and Mr. Pascoe.

He did not know the origin of the safety manual. As far as he knew Mr. Pascoe was responsible for updating the safety manual, and perhaps Mr. Tramontana, but not sure how much involvement Mr. Tramontana had.

Asked if there were any other formal safety program activities other than direct communications with pilots and the quarterly safety meetings and the anonymous safety reporting, he said they assigned FAA safety courses to the pilots as well. They used to be assigned monthly, but participation was difficult. After that they were assigned once a quarter, the month before the quarterly safety meeting, and they would be discussed in the meeting. The change to quarterly assignment of those courses occurred in 2017. Prior to that it was monthly. They kept a record of who completed the courses.

Asked what high-level manager or executive was responsible for managing safety at Liberty, he said that on paper he believed Chris Vellios was listed. That was who they technically reported to. They would have him sign off on verification of meetings. Asked whether Mr. Vellios did anything else besides verify that meetings were happening, Mr. Simone said not that he was aware of. He had very little contact with Mr. Vellios.

Mr. Simone was read an excerpt from Mr. Vellios's LinkedIn profile on the web which stated that he had "led charge to create a culture of safety, driving down overall cost of operations and engaging teams from front-to-back in organizational vision and mission" at Liberty. Mr. Simone was asked if that sounded consistent with Mr. Vellios's role at the company. He responded that he was not sure who wrote that or when it was written, but it was not consistent with Mr. Vellios's role during Mr. Simone's time at Liberty. As far as Mr. Vellios's interaction with Mr. Pascoe or Mr. Duca or Mr. Tramontana, he was not sure "if there was much as far as with the safety aspects."

Asked whether the safety program was mostly Mr. Pascoe and Mr. Simone with support from Mr. Tramontana, he said, "Correct." Asked whether they felt they had the support of upper management if they had to make a difficult safety call, he said, "Up until 2017, yes." Then

FlyNYON became a thing and Liberty dropped out of membership with TOPS without telling tony Mr. Pascoe or Mr. Simone. Mr. Pascoe was more bothered by that than he was. Asked what Mr. Pascoe said about it, Mr. Simone said, “We were just really surprised, it was like what the heck, you know.” The idea was that TOPS wasn’t really doing anything for the company enough to justify the cost. Asked who told him that, he said that was what they determined for themselves. He did not hear that from any upper management.

Asked whether the role of Mr. Vellios in the safety program at Liberty changed or remained consistent during Mr. Simone’s tenure, he said it remained consistent. Mr. Tramontana did most of the oversight to make sure Mr. Pascoe and Mr. Simone were doing what they were supposed to be doing. Mr. Tramontana would stay on them about doing the meetings and things like that. He was the approachable one. If there were any concerns, it was much more comfortable going to Mr. Tramontana.

Mr. Simone was asked to describe Mr. Tramontana’s reaction to the change to Liberty doing FlyNYON flights, and he said it was, “This is what we gotta do now.” Mr. Simone added, “The excuse was we’re not making any money on tours any more. We have to do this. Without FlyNYON we have nothing.” Mr. Simone said he was pretty sure that was almost exactly what Mr. Tramontana had said. That was still hard for Mr. Simone to swallow, the whole money thing – that they did not have any money, that they were broke. Mr. Simone said he did not really buy it.

Mr. Simone said it was a tough transition because Liberty had a lot of pilots who had been hired to do doors-on tours and they had been doing it for a year plus, and charter flights. Mr. Simone had been there for seven years, and now Liberty was going to flip. Not everybody wanted to do the FlyNYON flights, and Mr. Simone was one of them.

Mr. Tramontana told the pilots that his hands were tied. They had meetings where the pilots were sat down and told that if they did not want to do it, get out now, hinting that it was not good. With the cold weather and everything, they were literally just told they had to “suck it up.” Asked who told the pilots that, Mr. Simone said Mr. Tramontana did. Asked to clarify whether Mr. Tramontana said that his hands were tied because Liberty needed the money, he said yes, that was why Liberty started taking the FlyNYON flights. In the past Mr. Tramontana had been able to push back on upper management, meaning Pat Junior, when Pat Junior had a crazy idea. Mr. Tramontana would say, “No, you’re crazy.” At some point however, that flipped. That was where “my hands are tied” came from, where “upper management says Pat Jr. can do what he wants now.” Mr. Simone knew Mr. Tramontana was not happy about it. It was a tough thing for Mr. Simone to accept as well.

Asked to describe the role of the director of operations, Patrick Michael Day, in safety management at Liberty, Mr. Simone said that Pat Senior used to fly a Dauphine helicopter for Liberty and Mr. Simone used to fly it with him. Pat Senior would call in every morning and run down the board in terms of what Liberty had for flights and how the weather looked. He would be very concerned on a bad weather day. He knew the area very well. Pat Senior had been a U.S. Coast Guard pilot in the past. He would see weather– fog or whatever – before it came in. He would know that things were going to get bad before they did, so he was involved that way. In

terms of making a physical appearance, he was there once in a while. When Liberty got rid of the Dauphine helicopter Pat Senior had stopped flying almost altogether. He did not show up in person, but he would still call in. Liberty got rid of the Dauphine in 2014 or 2015.

Asked to describe the role of the Liberty's chief pilot in safety management, and whether it was primarily prompting Mr. Pascoe and Mr. Simone to stay on track and keeping tabs on what they were doing, Mr. Simone said yes. Asked to describe liberty pilots' role in safety management, he said it was informal conversation. He was not sure if there was anything in writing about that. He always related it to the downtown operation. If someone was operating recklessly or something, they would have to take it up with the other company, or something like that. It was just an open-door policy really. If someone had a concern, you just could come in and talk and they would handle it. There was not a lot of email back and forth. People did not want to use the anonymous safety reports.

Mr. Simone said that Mr. Pascoe left Liberty in September or October of 2017. Asked why Mr. Pascoe left, he said that Mr. Pascoe left for family reasons. The other Liberty pilots helped Mr. Pascoe find a job at Boston Medflight so he could be closer to home. Asked how Mr. Pascoe felt about Liberty taking the FlyNYON work, he said it "didn't go over well." Mr. Simone did not think Mr. Pascoe had ever flown one of the FlyNYON flights. Mr. Simone said, "I think the consensus was that the idea of it was not good."

Asked to describe the role of Patrick Kevin Day at Liberty Helicopters when Mr. Simone was there, he said sales, charter marketing. Asked whether Mr. Day was still employed by Liberty when Mr. Simone left, he said he did not know. Over the last few years Mr. Day's focus had been FlyNYON.

Asked whether Liberty and NYONair were sort of at arms-length until September 2017, Mr. Simone said yes. Asked how the relationship between Liberty and NYON changed after September 2017, and what the power dynamic was like in between the two companies in terms of deciding how to do things, he said it was Liberty's "hands are tied." FlyNYON seemed to have the upper hand. They conducted their own weekly meetings. The operation was already in place the way FlyNYON did it and when business grew substantially Mr. Duca and Mr. Fabia did the SOPs to try to get everybody on the same page because the way it was originally being done everybody was doing it their own way, so it evolved.

Mr. Simone was asked to describe what he knew about FlyNYON's safety program. He said, "I don't know of it at all. They would just conduct their own meetings and have their own agenda, and then they would send out an email afterwards to say what was discussed, they would send out the minutes. It was like the same meeting over and over again almost." Recurring topics involved the harnesses, the cold weather, cold weather gear, the minimum temperature. It was like the same meeting every week. Pilots would complain about things and management would say they were going to fix it, and the next week they would talk about the same problems. Nothing would ever seem to get done.

Asked why FlyNYON was not taking action to address the issues, Mr. Simone said he did not know if he could answer that. It just seemed like there was a lot of pushback any time there was

a concern. They did react to certain things. The main concern was things falling from the helicopter. He did not know how many things they had lost from the helicopters in the past. He knew there were several, so they tried to mitigate that risk. Mr. Fabia was trying to design a cell phone holder and there were a lot of things being done behind the scenes to try to help. They did purchase winter gear for the pilots, but at some point, it was just too much.

Asked to describe the gloves FlyNYON provided to pilots, he said he never wore them. They were huge. Pilots were bringing them and wearing them to warm up their hands. He thought there was an insert and they were rechargeable electric heated gloves. They looked like ski gloves. He would not fly with them. He had his own. He might have done two of the flights over his last couple months at the company and he just wore his own. Asked whether it would have made it difficult to operate the radios, he said he thought they were taking them off just prior to start. The flights were between 15 and 30 minutes, and the 30-minute flight was a tough one. They had tried a few types of gloves.

Asked how many NYONair or FlyNYON flights he had operated, in total, he said that since FlyNYON began booking them with Liberty he had flown about four. It was well known he did not want to do them. He had gone to ops and told them not to put him on the flights unless it was an emergency, so to speak. Asked who in ops he spoke with about that, he said that Kai and Kalin worked in dispatch and they knew how he felt about the flights. They were both Liberty employees. Asked where they were physically located when they were working, he said they were originally always at Liberty and they moved to the NYON base at some point, maybe November or December 2017. Mr. Simone wondered what was going on because Liberty had just moved into a brand new building with a nice operations center and a few months later they moved the operations people to the FlyNYON HQ. They were running Liberty dispatch from NYON during Mr. Simone's last month at Liberty.

Mr. Simone was asked why he left Liberty Helicopters and he said, "NYON." That was what he told Mr. Tramontana. He met with Mr. Fabia as he was leaving to help Mr. Fabia assume the duties of safety officer. Asked what it was about FlyNYON that had made him want to leave, he said "I just didn't think it was a good idea." In addition, he never wanted to work for Pat Junior. Mr. Simone had worked at Liberty a long time. Mr. Tramontana had lost control, so to speak. He could see it coming. Mr. Simone was seeking another job in 2017 and had interviews in March and September. He had been trying for a while by the time he left. He could just see the change. From a management standpoint he did not think it was a good situation. Asked to clarify what he meant by that, he said "Having Pat take control, so to speak." In the past, if Pat Junior had something that was not the best idea, Mr. Tramontana could say no. When Mr. Tramontana lost control, Liberty lost the upper hand. As far as the safety aspect went, Mr. Tramontana was no longer able to say no to Pat Junior. Whatever Pat Junior said was okay. Pat Junior's attitude was not as safety conscious, experience-wise. Pat Junior was not really that into the safety aspect of the business. Even when Mr. Day was flying, Mr. Simone heard that he was like the "cavalier pilot," things like that.

Asked when the "control flip" happened and Pat Junior became dominant over Mr. Tramontana, Mr. Simone said that occurred in summer 2017. He did not know exactly when. New policies came out. If there was any indication that a pilot was in a bad mood during an interaction with a

CX rep during the loading process, the CX reps would go back to FlyNYON management and it would be a big deal. One of the pilots was asked to resign or be fired. That had not come from Mr. Tramontana, it had come from Pat Jr. A pilot named Dave had resigned because of it.

A pilot named Amanda Fouche left Liberty because she turned around on a flight because she was too cold. Mr. Tramontana told her she had made a good decision safety-wise, but in a roundabout way it became “if you can’t fly the FlyNYON flights we might have to let you off until the summer because the only flights we have are FlyNYON. It was an indirect way of saying she might want to start looking for a job.

The feeling became “one strike you’re out.” If a pilot screwed up once. The pilots were told that if they wanted to leave they should get out and that the company had a stack of resumes. That communication had come from Mr. Tramontana, but Mr. Simone said he thought Mr. Tramontana did not want to have that meeting. Mr. Simone thought that Mr. Tramontana was trying to be nice and telling them to get out while they could.

Mr. Simone was asked if he had any safety-related concerns about the type of operations that were being conducted by FlyNYON before the accident. He said yes. In addition to cold weather operation issues, he had sent Mr. Tramontana an email about the number of items passengers brought on FlyNYON flights. He also wanted to make sure the passengers were signing a waiver to release the company from liability. Conducting flights at night with the doors off was another concern. Besides the fact that he thought the FlyNYON flights “were ridiculous” to begin with, this added to the madness.

Mr. Simone said that initially there were some flights with professional photographers, involving two or three passengers at most. It was easier to manage, and they had operated those flights in twin-engine helicopters. Then it became four passengers in the back, one in front, maybe two in front if they wanted. It seemed too risky. Then NYON came up with the “adventure seat” where passengers in middle could sit on the side of the helicopter. It would be one thing if that was being done by a professional who did it all the time, but these were tourists. The flights were marketed towards tourists.

Asked to explain what specifically he was concerned might happen, Mr. Simone said that something falling from the helicopter was the main concern. That concern went back to his experiences in flight school. They were told to secure loose items, even paper. To have five people who had never been in a helicopter before was concerning.

Before FlyNYON had CX reps, the pilots would meet and brief the passengers themselves. They would tell the passengers everything had to be secured. They were to have nothing in their pockets. Later they would be flying and one of the passengers would pull a cell phone out of their pocket and start taking pictures. Nobody listened. The risk kept increasing and it seemed to Mr. Simone to become a more and more dangerous operation.

Asked whether he was aware of any safety-related incidents involving potential for conflict between passenger tethers and flight controls before the accident, he said he did not know how they routed the front tether. He thought it was attached to the seat where it clipped in. He could

not remember, but it was always a concern when they flew passengers in the front of the helicopter, even on regular tours. Passengers in the front would have a camera and the pilots would see the strap and they would always make sure the passenger put it around their neck or took it off. Mr. Simone thought that had been taught in a training class. A pilot could not have any of that near the collective, the fuel control lever, or the fuel cutoff.

Asked whether the location and guarding of the fuel controls appeared to be a safety issue, he said he supposed so. He said the collective was there also, so that was another thing. Liberty had one helicopter the pilot flew from the left seat. It was hard to fly and land, but everybody loved it because all of the controls were on the left side of the helicopter away from the passengers, except the person behind the pilot if they stuck their foot up front. The Twinstar had the fuel controls above the pilot which was better, except when people wanted to use it as a handle to get up. Mr. Simone said he did not know if there was a perfect solution.

Asked whether anyone had reported a near-miss type conflict between the supplemental restraints and the flight controls he said no. Asked whether he had any concerns or was aware of any other Liberty pilots' concerns before the accident about the ability of passengers to evacuate a FlyNYON flight on the ground in an emergency situation, he said he had a concern and he was sure that other pilots had the same concern. When they put four people in the back all tethered up, even in a hard landing or rollover situation on the ground those people were in so tight with so many straps that it was a potential disaster no matter what.

When he had done the flights early on, he would tell people to undo the chest strap and pull the harness over their shoulders and slide out of it if they needed to get out in an emergency. That was with the yellow harnesses.

Asked when Amanda Fouche left Liberty, he said she left in February, not too long after Mr. Simone left Liberty.

Asked to describe his perceptions of the safety culture at Liberty Helicopters, he said everything was good at Liberty. They had an open-door policy. There would be a daily conversation towards the end of the day for the pilots on Mr. Simone's team. Everybody knew it was an open dialogue.

Asked to describe his perceptions of the safety culture at NYONair / FlyNYON, he said he thought they meant well, and they tried. They held weekly meetings. Everybody participated. There was just a lot of negativity. The pilots did not want to do the flights, and if they wanted any changes made it was very difficult. The cold weather thing was difficult. The pilots were very disgruntled. FlyNYON bought the pilots jackets. Originally the jackets had the FlyNYON logo, and then a couple weeks later NYON took all the jackets back and embroidered the pilots' names on them. The joke was that that was so the CX reps could identify the pilots by name so that when they went back to NYON they could say which pilot was misbehaving. The culture took a downturn during the winter. The pilots had the same complaints all the time and they never seemed to get resolved.

Asked whether the Liberty pilots were kicked out of the weekly NYON meetings, he said not that he was aware of. During the time he was at Liberty an invitation was sent out and they were encouraged to participate. If they were on shift they would put the phone in conference room or operations on speaker and everybody would participate on speakerphone.

Asked to describe the role of Moe at FlyNYON, Mr. Simone said he thought Moe was upper management at NYON. He would just come out and load the aircraft. He was just functioning as a CX rep when Mr. Simone interacted with him or saw him on the ramp. Asked whether he had any problems with Moe, Mr. Simone said no, he tried to stay as far away from the FlyNYON operation as possible unless there was an issue that needed to be addressed or if he needed to be retrained on how to load passengers.

Mr. Simone said that during the last few months he was at Liberty there were two different safety functions going on. NYON was doing their own safety and Liberty was still doing theirs, but they weren't intermeshed at any point. There was no interaction between NYON's safety department and Liberty's. They never sat down and said "this is what we're going to do now" because there was no announcement from management as far as how they were going to handle the safety department. Mr. Simone said, "Maybe we could have done that, but the transition happened really quickly." He added that Brent Duca and Scott Fabia had taken it upon themselves to try to come up with solutions and make it as safe as possible. Mr. Fabia had put in a ton of work. He was a new guy at the time and now he was gone. He had been trying to impress management. Mr. Simone had been there over 6 years so that was not something he felt was necessary because of the amount of pushback. Mr. Fabia came up with solutions, even before he was made a safety officer, and nothing ever came of it. He was one of the few pilots that "really ran with it."

Asked whether he had heard about the Liberty pilots being kicked out of NYON's weekly safety meetings after he left Liberty, he said no.

Mr. Simone was asked who his safety officer counterpart was at FlyNYON. He said he did not think they had anybody listed on paper as far as a safety department, but Christi Brown did the safety call-ins and she would send out the minutes as well. She was taking that role, so to speak. Asked whether he ever communicated with her in his role as safety officer, he said very little, not formally. They might speak out on the ramp. She put on a few demonstrations or classes out by a helicopter that the Liberty pilots participated in, but they did not communicate formally.

Asked whether any kind of risk assessment had been done on the evacuation of the tethered passengers in an emergency, he said he did not know. The FlyNYON flights were something that had evolved from flying professionals with two passengers into flights with five or six passengers. He knew there was concern, but he did not know if there was a risk assessment.

Asked whether FlyNYON had their own people working in the operations control center, he said yes, at their own base. Asked to describe their role, he said he did not know. He went to that building once. He could not remember who was there. NYON had their own operations people who would book the flights and dispatch them, but he was not sure who was doing that. He thought Kai would go there part time and help. He did not know specifically.

Asked whether Mr. Tramontana was his main contact for both safety and operations because Pat Sr. was not often there he said, "Yeah. Pretty much." Pat Sr. would call in and just run down the board and see what was going on, but his physical presence was rare. Early on, when Mr. Simone started at Liberty Pat Sr. had been there much more often because he was still flying.

Mr. Simone was asked if there was a phone bank with two lights flashing in the operations control center and one was Pat Sr. and the other was Pat Jr., which line the ops people would answer first, indicating which Pat had operational control, he said that was a good question. He did not know. Before 2017, it was Pat Sr. From 2017 to present it had shifted to Pat Jr. because he thought the Liberty operations people were also employed by FlyNYON. At least several of them had been working for NYON part time as well. It shifted sometime in early 2017. They had new ops people who had had very little interaction with Pat Sr. Asked whether these people had had more interaction with NYON even though they were Liberty employees he said that was correct.

Asked if he had ever seen the FAA come by Liberty during his time as safety officer, he said yes, but he had never met with them. He did not know exactly when they came. On several occasions they went through the hangar and checked the maintenance logs. He knew they had observed the loading of the FlyNYON passengers. He had not been present for that. He would have loved to have been a fly on the wall for that one. He wanted to say it was October or November 2017 when the FAA observed FlyNYON. When the pilots subsequently voiced concerns to Mr. Tramontana, his answer was that the FAA had come and seen it and said they were good, not to worry about it. Asked whether the response to FAA being there had been that they had signed off on the activity, and that everything was fine, he said yes.

Mr. Simone briefed in a meeting that the only thing the FAA told them to do was to ensure the pilots got back in their seats and buckle their seatbelts in case of an emergency. That was the only change that came out of the meeting with the FAA. That was the only change that came out of the visit that he knew about. That was what Mr. Tramontana had told him had come out of the visit. Mr. Tramontana made sure Mr. Simone understood that and passed it along to the other pilots.

Asked whether he had ever seen a third-party auditor like ISBAO perform a safety audit at Liberty, he said not that he knew about.

Asked if there was any other information he would like to provide that might be relevant to the investigation that had not already been discussed, he said he had concern about FlyNYON continuing to operate doors-off flights. The pilots that were doing them were new pilots. They did not have any experience, so he thought it had become even more hazardous. At least when they had done photo flights in the past it was normally a senior pilot who was chosen. Now, veteran pilots did not want to do them because they understood the risk. Instead, pilot coming out of training with minimal hours were doing them and Mr. Simone did not think they understood the risks.

The interview concluded at 1142.

19.0 Interviewee: Gary L. Middleton, Principal Operations Inspector, FAA

Representative: Matt Smith, FAA

Date / Time: April 17, 2018 / 1302 EDT

Location: Via telephone

Present: Van McKenny, David Lawrence, Bill Bramble– NTSB;
Vic Mevo – FAA

During the interview, Mr. Middleton stated the following:

His name was Gary L. Middleton, and he was 69 years old. His title was a Principal Operations Inspector (POI) and worked out of the Cincinnati Flight Standards District Office (FSDO), GLO5. His background included joining the FAA in October of 2007. Prior to that, he flew for Air Wisconsin for 28 years, and turned 60 years old the day before he started with the FAA. He was a chief pilot for a part 135 freight operation flying DC-3's, and he was a flight instructor and owned an airplane ferry business. He said he had a heavy background in light airplanes and air carrier flying. He held an ATP certificate with single and multiengine ratings and commercial single engine privileges, a CFI, CFII and MEI certificates. He had type ratings on the BA-146, DC-3 and CL-65.

When asked the breakdown of certificates he had oversight authority over, he said he had four part 135 certificates, one part 137 certificate, two part 141 certificates, and "a bunch" of part 91 operators, probably 29 or 30, and they all had various LOA's.

He characterized his workload as "non-stop busy," and each of the certificates were busy, like adding airplanes and keeping track of them. He also handled a lot of pilot deviations, and was the point of contact for UAS operations, which kept him busy. He was also the inspector in charge of the Dayton Air show. He said everyone in the office was kept busy, and there was not much down time.

When asked what guidance he used to conduct his job, he said it was primarily the FSIMS, 8900, and Advisory Circulars. He also used bulletins that would come out, SAFOs, and the guidance that came with the OpSpecs and LOAs. There were also a lot of miscellaneous things that the FAA would put out.

When asked for a background of the East West certificate, he said he took over as their POI in July of last year. He believed they were originally certificated in 2008 as a single pilot operation. They then decided to upgrade the certificate to a basic "any airplane" certificate, and it was pretty much completed when he took over the certificate last summer. They then went from one helicopter to six, and recently added a Bell 206 Long Ranger to the certificate. They were also issued a part 91 air tour LOA for their operations in New York. He said he had been "very busy" with East West recently, and they were starting a class of 5 pilots soon in anticipation of getting additional helicopters.

He said East West's current operations were in New York and Los Angeles, and they recently closed their Las Vegas and Miami bases, mainly because they were going to have 3 helicopters go into heavy maintenance. East West had a 145 repair station up in Quebec, Canada. He was not personally familiar with the repair station, but knew that 3 of the East West helicopters were going in for scheduled maintenance. East West was closing the Miami and Las Vegas operations and moving aircraft to Los Angeles and New York to support those operations.

At the request of East West, The FAA handled several management changes for the certificate, including changing the director of operations and chief pilot. East West was also in the process of getting their own check pilots approved for the 135 operations.

When asked about NYONair, he said the East West had 6 dba's (doing business as), and two of them had the name "NYON" in their dba. NYON was just a "doing business as." Their operation was still "East West Helicopters," as listed on their A001 OpSpecs (operations specifications). For the Part 91 LOA's, that was covered in OpSpecs A449. He said he was currently in the process of adding one additional dba and dropping another because Miami and Los Angeles worked under different dba's.

When asked when NYONair purchased or became active on the East West certificate, he said there was no "certificate to it," and the word "purchase" had no involvement with a dba. An operator could choose to operate in different locations as a dba so long as it was listed on the DOT economic authority certificate, which East West had. It was the same part 135 certificate, and they were just "doing business as." He did not know if those dba's were on the certificate prior to his taking over the certificate. East West was a full part 135 operator as of about August 27, 2017. East West added most of the part 91 air tours in September or October 2017.

When asked if he knew anything about NYONair, he said they were the same people as East West, including the same personnel and same machines, just operating under a separate name.

When asked if he knew why East West wanted to upgrade to a full 135 certificate, he said they had been a 135 since 2008, but only a single pilot/single aircraft. He believed they decided to expand the certificate sometime in January 2017.

When asked who at East West he primarily interacted with, he said up until recently it had been Patrick Wells, who had been listed as the agent for service, or accountable manager as he preferred to call himself. Since they had recently changed the director of operations and chief pilot, he had been interacting with Brian Rosenberg, who was the chief pilot and was now the director of operations. When asked who the director of operations was prior to the accident, he said the last name was "Day", and could not remember his first name, but he had been since removed and he never met the man and did not know much about him.

When asked when Brian Rosenberg became the DO, he said it had been within the last 7 days, but Mr. Day was the DO at the time of the accident. The plan had been to change the DO over all along. His understanding was that Mr. Day had been in New York but had not been involved in the operation at all.

When asked if it was unusual for a POI not to have interactions with the DO, he said normally it was not that way. He did not know much about Mr. Day, but had been told all along Mr. Day would be resigning from the position. Typically, a POI would deal with the DO, but he said that each operator was a little different, and for some operators he may only deal with the chief pilot. He dealt with Mr. Wells who he believed had a business interest in the company.

When asked if he was aware that Mr. Day, the director of operations at East West, was also the director of operations at Liberty helicopters, he said there were two Mr. Days, the senior one at Liberty and the junior one at East West. When asked which one (junior or senior) was the DO at East West, he said "Mr. Day junior." When asked to clarify, he said that Mr. Day junior was the DO at East West. He understood that the two Days were father and son.

When asked if he had ever visited the East West operations in New York, he said he was heading to New York tomorrow to visit them for the first time to observe their ground school, operations area, observe their flights, and conduct a few ramp checks. He had not had an opportunity to visit East West prior to the accident.

When asked if East West still listed their primary place of business as Cincinnati, he said yes. When asked if East West had any operations in Cincinnati, he said "occasionally, I guess," since they had a 145 repair station there in Cincinnati. The 145 repair certificate was separate from their 135 operations certificate, but East West would fly their helicopters in and perform maintenance on them at their repair station, which had a big building and three bays to work on the helicopters. When asked to clarify if East West operated helicopters on their 135 certificate out of Cincinnati, he said "occasionally, but not on an ongoing basis." When asked what type of 135 flights they operated out of Cincinnati, he said that he assumed they were part 135 and part 91 flights, but had not done any surveillance on those flights since they had not done much operating there.

When asked if he had ever done a 135 surveillance of their operations in Cincinnati, he said only a base of operations inspection since they did not normally keep aircraft in Cincinnati. East West did have office space in Cincinnati, and that was where Mr. Wells had his office.

When asked how the FAA in Cincinnati conducted surveillance of the East West operations in New York, he said it could go one of two ways; the POI could travel to those operations to observe them, or the FAA had a published work program for part 135 operators. There was no such program for part 91 LOA operators. He could also ask the nearest FSDO, in this case TEB, to do surveillance for him. It was all time and work load permitting, but they did have required activities they had to perform.

He said the FAA maintenance folks had been out to New York several times.

When asked if there was anything in his guidance that would have prevented him from going to New York to observe the East West part 91 operations, he said there was not anything preventing him to do that, but there was also nothing really requiring him to do it either. It was all a workload-permitting basis, but if they went to observe the 135 operation, it was the same as the 91 operation since they were using the same machines.

He said there had been a maintenance inspector who had gone out to do an inspection prior to the accident and he came back and told them there had not been any helicopters for him to observe, but he had been told about the harnesses they were using and what the set up was, and had also been told that the passengers were using the FAA approved installed seat belts, and in flight they would take those off and still be protected by the supplemental system. The inspector was told the system was not permanently affixed to the aircraft, and only clipped onto the aircraft. At that point, there was no requirement for them to do an inspection on the system. He was doing an inspection tomorrow along with their maintenance inspection.

When asked if his 135 inspection tomorrow would include their 91 operation, he said “it was the same aircraft.” They primarily did 95% of their business as part 91 air tours. When asked if the East West part 91 flights were operated under their LOA or as simply part 91 flights, he said to his knowledge they were operated under their “91 LOA 849, under per 91.146.” When asked if he had oversight responsibility for the East West part 91 LOA, he said yes “since we issued it.”

When asked if he had ever been in contact with either the TEB or Farmington FSDOs since he was over in Cincinnati, he said he had not, and “I had no reason to prior to the accident.” His FLM and PMI had been in contact with them a few times.

When asked if he had been made aware that East West had been operating doors-off flights in New York as “shoe-selfie” flights, he said yes, after his PMI had come back and informed him of how they were doing those flights. He said they had a lot of discussions in the office whether it met their requirements for surveillance, and decided that it did not, and there was no place to go with that. When asked if he had any concerns about how the passengers were being tethered, he said he personally did not see how they were being tethered, nor did the PMI since it was only explained to him, and they had no guidance to tell them whether the tethering of the passenger was being done right or wrong. If it was not permanently attached to the vehicle, it did not require FAA approval. They were told NYONair was using the FAA approved seat belts properly.

He said he talked to Mr. Wells about, who walked him through how East West was doing the tethering and harnessing, and he did not have any issues to address with the harnesses since they were just clipped to the aircraft, and the FAA did not have any authority to say “yay or nay” on the harnesses and tethers. When asked if he had ever seen this type of supplemental restraint system before, he said he personally had not.

When asked if East West had ever conducted a risk assessment on these supplemental restraints, he said he was not aware of any. When asked if East West had ever conducted a risk assessment on the “shoe-selfie” door open flights, he said not to his knowledge. When asked if East West had ever conducted a risk assessment of the emergency egress of passengers while using the supplemental restraint system, he said not to his knowledge.

When asked if he knew if East West had an established safety program, he said he did not have any knowledge of one, other than within the confines of part 135. When asked what he meant by “within the confines of part 135,” he said there were requirements in 135 for the operator’s GOM

to address certain things. He did not know if that would address the harness and tether systems since, under part 135, they would not be allowed to use those restraints.

When asked how he would know an operator would not be using those restraints under part 135, he said that “aviation was a trust business,” they count on the operator and pilots to operate the airplanes properly, and the FAA “can’t be everywhere at one time with the lack of personnel,” and there had to be a level of trust between the operator and the FAA. He said they do what they were required to do at a minimum, and more if they had the time.

When asked if East West had a safety manual, he said no, they did not. When asked if that was unusual for a 135 operator, he said you would have to define “a safety manual” was, and what the requirements were for a safety manual. When asked who the management individual at East West in charge of their safety programs was, he that would be their director of operations, and you would have to look in their OpSpecs, and it should be Mr. Rosenberg who was receiving the safety bulletins. Prior to the accident, he did not know and would have to refer to the OpSpecs prior to the accident.

When asked if he knew anything about Liberty helicopters, he said no he did not, and would prefer not to.

When asked if he was aware if East West and Liberty had a charter contract between them, he said he did not have knowledge of that. Asked if that would be a concern to the FAA, he said it would depend what the contract said and he would need to consult with a lawyer.

He heard about the accident in the news. He did not know who the operator was, and he was concerned that people had been killed and also wondered who the operator was. When asked what he did when he found out that East West may have been involved in some aspect, he said he did not have any reaction since he would wait to get the facts first. He said he would have been very surprised in East West had been involved. He remembered that he called Mr. Wells, who told him that it was a Liberty helicopter, and East West did not have anything to do with the accident.

When asked, since he had never seen the East West operation, how he would know how much involvement East West had since it was their loading of the passengers and restraint system, he said his FLM was mostly handling the communications with the TEB FSDO, and gave him information. He also talked with Mr. Wells, and got information from him. He tried to stay out of the investigation and get information as it came in, but they were “fairly comfortable” that FlyNYON had nothing to do with the accident. At the time, they did not know they were booking the flights for Liberty, and had been told NYONair “referred” passengers to Liberty when NYONair did not have enough helicopters to conduct the flights. He had not heard about FlyNYON booking the flights until about 10 days ago. He was also not aware there was even a NYONair logo on the Liberty helicopter, though that was a marketing thing by NYONair.

When asked if he personally, based on his experience, had any concerns about the supplemental restraint systems used by East West when he learned about them, he said “sure, I did” and he had discussions with his manager about it. Through his manager there were suggestions made, and

his manager took it “higher up” for someone to take a look at it, but they had no authority over the supplemental restraint system so long as the seat belts were being used, so “basically our hands were tied.” He believed the FAA should take a “strong look” at the supplemental restraints.

He did not know who his manager had spoken to about the restraint system.

He added that NYONair was currently flying open-door flights, but only using the aircraft seat belts, and no supplemental restraint systems. They were also modifying their doors with “camera ports” to solve the need for the doors to be open.

Going tomorrow to look at their recently approve training program since NYONair would be holding a class for 5 new pilots in Kearny, probably at their offices, and also visit their helipad nearby. The PMI was also going out with him.

He said it was his understanding from talking to their maintenance folks that if the restraint was not permanently attached to the aircraft, the FAA had no authority over it. That would be for part 91 operations. They had never had to deal with tethers and harnesses under any operation, part 91 or 135.

When asked if an operator used those supplemental restraint systems under a part 135 flight, what would he do, he said that would be a maintenance function, and he would have to look it up to see the guidance.

When asked if there would be a particular branch in the FAA to contact for advice on supplemental restraints, he said he did not know, and would have to ask their maintenance guys about it

When asked if there was any response he wanted to provide clarification on, he said no.

He said the NYONair sign on the Liberty helicopter may have confused things initially, but it was strictly a marketing thing for NYONair, and they had since taken those signs off the Liberty helicopters.

He did not know anything about the float system for the helicopters.

The interview concluded at 1402.

20.0 Interviewee: Paul Tramontana, Liberty Helicopter Chief Pilot

Representative: Paul Grocki, Law Offices of Paul Lange

Date / Time: April 24, 2018 / 0805 EDT

Location: Doubletree Hotel EWR

Present: David Lawrence, Van McKenney, Bill Bramble– NTSB; Vic Mevo – FAA; Brian Rosenberg – NYONair.

During the interview, Captain Tramontana stated the following:

When asked how Liberty pilots were trained for float deployment, he said for the FlyNYON flights, Christine Brown and Brent Duca trained the pilots. When asked specifically about Liberty flights, he said for the 135 flights, Brent Duca did all of the training for Liberty helicopters. Mr. Tramontana was not involved in training.

For each new hire class, there was a week of ground school, and then they would do the flight training.

In the ground school, they covered all the regulations and local operations, and included the operations manual, weather and OpSpecs.

When asked about specific training for the floats, he said pilots were trained that if they had an engine failure, blow the floats as soon as practical, and land on the water.

When asked about the process to blow the floats and if pilots got a chance to practice that, he said that there was no hands-on practice. Brent would bring a helicopter into the hanger, and would show them the handle, but they could not blow the floats for training. He had been told some pilots could blow the floats for maintenance purposes. If maintenance would need to blow the floats, Brent would be involved in the discussion, grab some pilots on staff to watch them blow the floats.

When asked if pilots were provided directions on how to move the handle to blow the floats, he said only that which was given in the manual, to make sure the pin was out and to pull the handle.

When asked if there was a dialogue regarding the pilot expectations when the floats were blown, he said he did not know what was discussed with the pilots, and it was never discussed with him what to expect.

When asked what he was told by Liberty management about FlyNYON flights when first approached, he said he was told Liberty was going to start doing FlyNYON flights using NYONair procedures they had at that time. When asked what his response was, he said "I said ok." He then got with Brent and they started doing the flights. He said he wanted to be sure that Christine Brown was going to be the primary training person for the flights. At the time, there were already Liberty pilots doing those flights part time, and he wanted to make sure she trained the pilots. He did not give Brent any other directions.

When asked if Brent had any concerns about the flights, he said "not at that time." Brent liked the flights since it was a different type of flying.

When asked if at any point after seeing Christine's training if he had any concerns about the FlyNYON flights, he said he personally never saw the training Christine was giving, and he never participated in the FlyNYON flights and never flew one.

When asked if Brent approach him later with any concerns, he said no.

When asked if he ever had a pilot refuse a FlyNYON flight, he said no. When asked what would happen if a pilot did refuse one, he said he would bring that to his Director of Operations (DO) and would ask for direction on how to handle that. He had never had to do that, and the pilot's job would not be in jeopardy if they refused a FlyNYON flight.

When asked from a management perspective who gave him the most direction, he said his DO. He would speak with the DO about 2 times a week. He said he had never received any directions from the NYONair CEO.

When asked if he knew how the DO responded to the NYONair CEO's direct interactions with Liberty pilots, he said he did not know. He said he did discuss those interactions with Pat Day senior regarding some of the things the NYONair CEO was putting out to the pilots, and that it had to stop. This was done by phone call. He could not recall when that occurred, but it was every time the NYONair CEO would blast something out to the pilots in text that he was made aware of, and he would then talk to Pat Day senior. That happened 2 or 3 times. It would stop afterwards, but then start up again on a separate issue. When asked if he had the authority to override the NYONair CEO, he said yes, the CEO never gave him any directions, and never communicated with him directly to give him any instructions. The CEO would text the pilots, bypassing him by going directly to the pilots.

When asked if he was ever given a training budget for the safety officers, he said no.

When asked about the financial condition of Liberty at time of the accident, he said he was not sure. He knew they were going into the 1st quarter, and 1st quarter was always a financial drain on the company because no one wanted to fly around the winter time.

When asked if Liberty pilots ever express concerns regarding interference with the fuel control quadrant from passengers moving about in the front seat, he said not to him. When asked if Liberty pilots ever expressed concerns about inadvertent seat belt release, he said not to him.

When asked if there was any guidance given to the pilots if a passenger was intoxicated, he said they would go with the regulation, and that there was no intoxicated passenger allowed on their aircraft, and all the pilots knew that. They would refuse entry on the aircraft for that passenger, and the flight would not be cancelled. They had never had that situation, and he would hope the pilot would notify him. There was nothing in writing saying what to do, and no SOP or policy.

He said Liberty had been a TOPS member for years, and he was very familiar with the program. When asked if a change in the operation, such as the FlyNYON flights, would trigger an additional review, and if a TOPS SMS was being used, he said TOPS did not have an SMS as defined by the FAA. TOPS had certain areas in their checklist to check. When asked it, to be a TOPS member, an operator would have to pass their checks for those areas they call the SMS area, he said he did not know. Liberty did not have an SMS program. When asked if there were any procedures within the Liberty safety program that would have triggered a review of these types of flights, he said the checklist would have triggered a review, and he believed that review

had been done before he was told Liberty was going to do those flights. When asked who would have done that review, he said the DO.

In reference to blowing the floats “as soon as practical” in the event of an engine failure, he said there was no real concrete direction on whether to blow the floats after entering the autorotation, immediately after, while in the autorotation, or after you were in the flare. They told the pilots to blow them as soon as practicable while they had time in the rotation to come up with another plan B if they did not inflate. That guidance was not written anywhere, and was considered tribal knowledge.

When asked to clarify Brent’s concerns later, he said they involved the harnesses not fitting as tightly as the pilots wanted them to fit, the knife that could have been a better knife to use to cut the tether, and the cold weather operations. When asked what he did about Brent’s concerns with the harnesses, he said he went to his DO. When asked what the DO did, he said he went to him about 1-3 times about the issue. The first time he would say he was going to handle it with the CEO of NYONair. When it was not being handled, he had a conversation with the CEO of NYONair and with Ethan Fang that they needed to get harnesses that fit correctly on the passengers. When asked if he believed proper fitting harnesses were a safety issue, he said he personally did not believe that the harnesses being a little loose would have any impact on the passenger falling out of the aircraft because they were not that loose.

Regarding the knife, he said he took that concern to his DO, who told him he would handle it with the CEO of NYONair, but time went on and nothing happened, so he told Brent and possibly Scott to research for some better knives and tethers. He thought it was resolved when NYONair told him they were buying new harnesses, but only about 4-5 or 6 new harnesses actually showed up, and there were no other brand-new harnesses. He did not believe NYONair ever looked for a better knife option for the passengers, but he was not sure about that.

When asked how the pilots conducted the weight and balance for the FlyNYON flights, he said for Liberty, all pilots had an app called “iBal” that they used to calculate their weight and balance to determine if they were out of CG or near gross weight. That was for 91 and 135 flights. It was not an app approved in their OpSpecs, and there was no weight and balance form that was completed. There was a slip of paper with the passengers and weights, provided to the pilot. If a pilot could not figure out “internally” by just looking at the passengers and fuel load, they could use the app to calculate that they were not over maximum gross weight.

When asked if there was an operational difference between a doors off and a door open flight, he said that on the aircraft they operated, they could not do doors open except for the sliding door because if the door was open it would be hanging out in the wind. They could do them with the sliding door that slid back and locked open. When asked if there was a regulatory difference between a doors open and doors off flight, he said he did not know.

When asked how involved in the Liberty operations the DO was, he said when he needed guidance, he went to his DO, and if he did not need his guidance, he did not go to him. He did not know what the DO was doing above him. He said the DO was at the Liberty operation about

once every two weeks. When asked how involved the DO was specifically with the FlyNYON flights, he said he could not answer that, and did not know.

When it was pointed out that Mr. Tramontana signed the OpsSpecs, and according to the POI was the contact at Liberty for the FAA and never interfaced with the DO, Mr. Tramontana said he was the main liaison between the Liberty and FAA, and he was given the direction by the DO to take care of issues with the FAA. When asked if he was aware that the Liberty DO was also the NYONair DO, he said yes.

When it was pointed out in Mr. Tramontana's last interview that passenger issues were to be brought to the attention of Ethan Fang, and asked what Ethan Fang had to do with the passengers and operation of Liberty aircraft, he said on the NYONair side, Ethan was the one that was put in the position that we would go to with passenger issues. They would not take issues like the harnesses, tethers, or equipment to Ethan since those were not passenger issues. When asked why not take those issues up with the NYONair chief pilot, he said the NYONair chief pilot was in Las Vegas. When asked if Ethan Fang had any aviation experience that qualified him to answer safety questions pilots may have with the equipment, he said he did not know.

Going back prior to 2017 and Liberty beginning to fly the FlyNYON flights, when asked if Liberty ever flew doors off and doors open flights, he said very rarely, but there was no policy prohibiting them. Most of those doors off flights were always production flights, such as when the New York Times would call them and say there was a fire in south Jersey. When asked if those passengers had special training for doors open, he said when Liberty had those guys come out, the expectation was much higher that they already had training, and they would always use the aircraft seat belts with a normal briefing. There was no extra training Liberty gave to its pilots for those types of flights, and they did not involve harnesses or tethers.

When asked who specifically told him Liberty had decided that they would begin operating FlyNYON flights, he said he was told by the DO that they would start doing FlyNYON flights. He did not tell him why, and did not know if Chris Vellios was a part of that decision.

When asked his personal opinion about Liberty's decision to take on the FlyNYON flights and if he was in favor of them, he said if it was his company they would not have been doing those flights since all of his flying had been with doors on, and he personally did not like flying with the doors off.

When asked if he personally felt like his "hands were tied" by doing the FlyNYON flights, he said that the company decided to do those flights, and the company paid him. If he personally did not think they were being conducted safely, he would have left the company, if because of his personal opinion he decided not to support it, then he was working for the wrong company.

When asked if he perceived Pat Day junior having more influence on the operational control of the FlyNYON flights than Liberty, he said no. When asked if he or his pilots felt like their jobs depended on complying with Pat Day junior's requests, he said none of the pilots' jobs at Liberty were in jeopardy for not flying FlyNYON flights. When asked if he was aware of an email that was sent to the accident pilot by the NYONair CEO stating that Liberty pilots were not allowed

to query about yellow or blue harnesses, he said yes, and he went to his DO to make sure he was aware of that. When asked what the DO did, he said he did not know. He said he also went one step further and talked to the pilot and explained that the CEO of NYONair could not dictate whether a Liberty pilot could question something or not. He made sure that when that conversation finished, and it was with the accident pilot, that he was good with the conclusion of the conversation, and he understood he was the PIC and could question anything that he wanted to. When asked if he made that clear to all the Liberty pilots, he said absolutely, verbally to all their pilots individually.

He said Brent was the Director of Training at Liberty. When told Mr. Tramontana was copied on an email from Brent to the NYONair CEO, in which the CEO said he was insulted by Brent's questioning of safety issues regarding the number of equipment available of a particular day, and that NYONair could take their business elsewhere, Mr. Tramontana said he did not recall that email. When told the Liberty DO was also copied, and when asked if Mr. Tramontana recalled the DO doing or saying anything in regards to the email, he said no.

When asked who was responsible for the safety of the FlyNYON flights, he said he thought it was a joint responsibility between Liberty and NYONair.

When asked who had operational control of the FlyNYON flights, he said the flights themselves were not being operated under part 135, so as far as the guidance on operational control, it was a 135 guidance and not a part 91 term, but Liberty operated those flights, and if Liberty did not want to initiate one of those flights, they would not have initiated one of those flights. When asked if Liberty could cancel a FlyNYON flight, he said yes, and an example would be for weather.

When asked if the DO at Liberty was effective in his job, he said any time he needed the DO's guidance on something, he was there. Whether he was effective or not, he said he had been a chief pilot since 2006, and the DO's effectiveness was never in question.

When asked why he did not personally like doors off flights, he said because he was afraid of heights, and all his flying had been doors on, and he liked to stick with what he knew and was comfortable with.

When asked about the timeline for the harness and tether and knife issues that were raised, he said it all started in January or February, somewhere along there, and the harness conversation may have started in October or November. Scott stated he was researching an alternative in January or February of 2018. NYONair had said they would buy all new FAA-approved harnesses around October or November 2017. Maybe about 5-6 new harness appeared around the same time frame.

When asked about the cold-weather operations, and who expressed those concerns, he said the pilots raised those concerns, and he went to his DO to tell him that they needed to have certain temperature limitations. That was discussed that with NYONair, and they were told a decision had been made that they would set limits on temperature, and then that did not happen. Then during the next cold spell in New York it became an issue, it again was discussed, and Liberty told NYONair that those would be the limitations for the flights. That occurred around January

or February of 2018. When asked if those limits changed, he said no, the limits they set did not change after they had put them in place.

When asked about cold-weather texts between Brent Duca and Pat junior, and that Mr. Tramontana asked Pat junior to call him, and if he recalled those texts, he said he did not remember if Pat had called him, but right after that the situation was resolved, and the limits were put in place. He said it was the Liberty DO who communicated that to Pat junior. He did not get any push back from the DO with setting those limits and sticking by them.

When asked if the DO expressed any concern about interaction between the NYONair CEO and the Liberty pilots, he said no.

When asked if Tony Pasco was the director of safety at Liberty, he said yes, and that Tony left because he got a job closer to his home. He said Tony was very effective as director of safety. He said John Simone was a former safety officer and was also effective. He said John left Liberty after he got another job closer to home with HeliFlite. When asked if either of them expressed concerns about the FlyNYON flights, he said he did not recall Tony expressing any concerns. If John Simone had expressed concerns, it was the same concerns about the harnesses not fitting properly, but he did not recall having that discussion with John.

Amanda Fouche Mercalato also worked for Liberty. She had to turn around on a FlyNYON flight since she was too cold, but there were no repercussions. He said he interacted with her and told her it was a great decision to turn around. That was it. He believed he asked her why she took off in the first place. She said she did not believe there was going to be a problem. Amanda left Liberty about a month later for personal reasons not work related.

When asked if there was a pilot who was asked to resign due to a conflict with CX, he said a pilot resigned after, from what he was told, a bad review by one of the FlyNYON passengers. It had nothing to do with safety, it was just a bad review. The pilot resigned because of this bad review. When asked if the pilot was asked to resign, he said he was told by his DO that if the pilot was not happy flying the flights, and not happy with the passengers, he was told maybe he should go look for another job. When asked if he knew what the pilot was unhappy about, he said no, and the pilot had been doing a lot of the flights, and he did not see that coming. His name was Dave Matulla.

When asked if Liberty had ever lost anything out of a FlyNYON flight, he said yes, a shoe on a flight in Florida, and a fire extinguisher that fell out into the water in NY. For the shoe incident, Christine briefed the pilot that he needed to check the passenger shoes, and for the fire extinguisher, they immediately moved all the fire extinguishers to a different location in the aircraft.

When asked what manager or executive was principally responsible for managing safety at Liberty, he said that was one of his responsibilities. Above him, it would be Pat Day senior and Chris Vellios. He said at Liberty, they all tried to manage safety.

When asked what was the role of the COO in safety management, he said he did not know. When asked about the COO's online profile that said he "led the charge to create a culture of safety" at Liberty, and if that was the case, Mr. Tramontana said he could not answer that, and did not know.

When asked about the Liberty safety manual, which said the safety officer was supposed to report to the COO, and if that was the case, he said that was the structure of the program, but could not say if the safety officer ever went in and talked to the COO.

When asked about the origins of the safety manual, he said that was before him, or before he was doing anything but as a part time line pilot. When asked how it was utilized, he said on occasions where a pilot would put a hazard report in, there were steps in the manual to follow to investigate the report. For the safety officer, there was guidance on how to do his job, and his duties and responsibilities. He said the safety officer was responsible for updating the safety manual.

When asked in the year leading up to the accident if he felt like he was losing authority over Liberty flight operations to the CEO of NYONair, he said no. When asked, he said he did not feel it was increasingly difficult to stand up to the NYONair CEO, and his management supported him when he disagreed with the NYONair CEO.

When asked if he was aware of any incidents involving potential conflict between passenger tethers and the aircraft flight controls prior to the accident, he said no.

When asked if there were any concerns about passenger egress on a FlyNYON flights while on the ground in an emergency situation, he said no.

When asked about the Liberty safety culture, he said "We have a good safety culture." When asked to clarify, he said he was a huge proponent to do things as safely as possible. He said the Liberty pilots knew that. If they had any issues brought to his attention, he would try his hardest to rectify those situation. A good safety culture started at the top and worked its way down. He thought for his pilots, nobody saw past him because he was the face of the company and drove the safety culture at Liberty.

When asked about his perceptions of the NYONair safety culture, he said it was not anywhere near that of Liberty's. He said it was a little bit all over the place with nothing really defined.

He said he did not remember ever using the term "my hands were tied" in terms of accepting FlyNYON flights, but those flights were flights he was directed to have his pilots fly.

He said in 2016, before Tony Pasco left, John Simone was his safety officer, and Tony was the director of safety and also a safety officer. He said he set it up that way so that one person was on each shift as a safety officer.

At time of accident, there was no director of safety, just a safety officer, Scott Fabia. Those were defined roles in the GOM manual.

Interview concluded at 0945.

21.0 Interviewee: Chris Vellios, Chief Financial Officer and Chief Operating Officer

Liberty Helicopters Inc.
Representative: Paul Grocki – Law Offices of Paul A. Lange
Date / Time: April 24, 2018 / 1000 EDT
Location: Doubletree Hotel, Newark, New Jersey
Present: Van McKenny, David Lawrence, Bill Bramble – NTSB; Victor Mevo – FAA; Paul Tramontana – Liberty Helicopters; Brian Rosenberg - NYONair

During the interview, Mr. Vellios stated the following:

He was 47 years old.

Asked to describe his professional background, he said he had graduated from college with an accounting degree and he had been working in accounting his whole career. For the last 13 years he had been working for Liberty Helicopters. Before that, he spent 12 years working for a hospitality group. Before that, he had had one- or two-year jobs in fields like financial services and electronics manufacturing. He was a certified public accountant and a certified global management accountant.

His current position at Liberty was Chief Financial Officer (CFO) and Chief Operating Officer (COO). He had been CFO since December 2005 and COO since January 2010. He had no aviation experience aside from working at Liberty. He was not a pilot or a mechanic. His date of hire at Liberty was December 2005. He served as executive vice president for two years before he became COO.

Asked to describe his responsibilities as CFO he said overseeing the administrative portion of the company. Asked to describe his responsibilities as COO, he said he oversaw day to day operations. He reported to the CEO and board of directors. The various departments in the company reported to him. The CEO and chairman of Liberty was Drew Schaefer.

Liberty's director of operations (DO), Patrick Day Sr., reported to him. Liberty's chief pilot reported to the DO, but he and the chief pilot did communicate. Mr. Vellios communicated with the DO weekly, more often when needed. They communicated by email, phone, or text.

Asked whether they had a standing meeting or whether it was ad hoc, he said they did not have a standing meeting. They communicated 1-3 times a week, so it was not necessary to have a standing meeting. Asked what kind of issues they discussed, he said personnel. They would discuss personnel they needed to hire for the season, and whether anybody was leaving. They would discuss the weather outlook for the coming days. They would discuss aircraft availability. They would discuss sightseeing operations at the downtown Manhattan heliport. They would discuss issues with charter operations.

Asked how Liberty was approached by NYONair about performing their flights, he said they were approached by Pat Day Jr. Mr. Vellios's initial meeting was with Pat Day Jr. After that, he had meetings with Gary Julian, NYONair's CFO to develop the agreement between the two companies.

Asked whose decision it was to start performing operations for FlyNYON, he said he arranged the financial aspects and the operations department handled the flights. Asked who told him they were going to do the flights, he said it was just a customer calling who had a request, and Liberty was a 135 on-demand operator. If a customer called and wanted to work with Liberty, they would explore that. No one told Mr. Vellios they should do the flights, it just happened organically. NYONair just called in and Liberty started doing the flights.

Mr. Vellios was asked if he was aware of how the flights would be different than Liberty's typical 135 flights, and he said yes, he was given an overview of the type of flight it was by Paul Tramontana and Pat Day Sr. Asked whether he had any concerns, he said "Sure." It was different than what Liberty was doing at the time, but the operations department looked everything over and decided it was appropriate. Asked who in operations it was that looked everything over, he said Pat Day Sr. and Paul Tramontana.

Mr. Vellios was asked if he ever examined the equipment, rigging procedures, or passenger loading procedures, he said he did not personally. Asked if he had ever flown on a FlyNYON flight, he said no.

Asked if anyone ever approach him with concerns about the flights, he said the only discussion he had had about concerns with the flights was with Paul Tramontana and the discussion was about the pilots and passengers being cold in the winter season with the doors off. They discussed how the passengers were being briefed and the importance of having NYONair tell them to dress appropriately. Mr. Tramontana suggested establishing a minimum temperature for the flights and getting certain clothing for the pilots. Mr. Vellios thought Liberty had purchased extra clothing for the pilots.

Mr. Vellios was aware of the Tour Operators Program of Safety (TOPS). Asked why Liberty ceased participating in TOPS after 2016, he said their sightseeing operations out of the downtown Manhattan Heliport had been reduced by the city of New York. The New York City Economic Development Corporation had restructured what the allowable flights would be and cut Liberty's tour flights by 50 percent. In order for Liberty to survive, they had to look at the various departments and see where they could save money. They had to lay off some employees and cut some programs. It was difficult because Liberty was one of the founders of TOPS, but they decided it was a program they could cut, and they would revisit joining it again after they figured out a new business plan for the sightseeing tours downtown. In the interim, they decided that they would continue to follow the standards of the TOPS program. Mr. Vellios felt confident they would be able to do that because Paul Tramontana was very involved with the industry. The cost of TOPS was substantial even though it was shared among the tour operators.

Asked to describe Liberty's financial condition around the time of the accident, Mr. Vellios said they were in their slow season. The first quarter was typically their slow season. It was winter.

They would hit the ground running with the sightseeing business again around Easter. Asked to describe the financial condition of Liberty between leaving TOPS and the time of the accident, he said it was fine. They were restructuring departments. They were doing 50% fewer flights so they decided to let some people go. They intended to bring back some of the people they were laying off when it got busy again. It was a business decision. If they had 50 percent fewer flights, they had nothing for those people to do.

Asked whether this drop in flights was part of the reason Liberty decided to start performing the FlyNYON flights, he said no, NYONair was just another customer that came in. Asked to describe the profit margin for NYONair flights, he said NYONair paid “market rate”, based on what Liberty was offering their other customers. Margins were thin. They were lucky to add 5-15% to the bottom line, depending on the year, the weather, and the TFRs.

Asked whether the number of people on a FlyNYON flight affected Liberty’s profit margins, he said no, it did not make a difference to Liberty. It did not affect the rate NYONair paid Liberty. Asked whether Liberty was paid any additional bonuses or was paid additional funds beyond the hourly rate, he said no.

Mr. Vellios was not aware of the pilot safety meetings. The DO and CP had not discussed them with him.

Asked whether he was aware that the NYONair CEO was sending emails and texts to Liberty pilots on various issues, he said he was not aware of the emails. He was included on one text message that had to do with customer service. Asked what that text was about, he said the message had not been specific. It just mentioned customers. It was not anything re-occurring that would alarm him.

Mr. Vellios was asked what would happen to a Liberty pilot who decided not to fly a NYONair flight. He said he would assume the pilot would have a discussion with the CP and DO as to what the reason was.

Asked whether flying a FlyNYON flight was a prerequisite for a pilot to stay employed at Liberty, he said no. The majority of their pilots were with Liberty before the company started doing business with NYONair. Liberty did their pilot training and had their downtime in the first quarter and most pilots were on board mid-March. Liberty had not started doing business with NYONair until mid-summer 2017.

Asked whether he communicated often with the NYON CEO, Mr. Vellios said that he had in the past. They had communicated about the payment schedule. Asked whether he communicated with him mostly in his CFO role, he said “right.” Asked whether he had communications with the NYONair CEO in his COO role, he said that the NYONair CEO would mention that he was in other parts of the country and finding success and expanding in Miami. Other than that, he could not recall anything specific. They communicated once or twice a month.

Mr. Vellios had not had any interactions with the FAA. If there was a base inspection, the CP handled it and if there were any issues they would be brought to Mr. Vellios’s attention. The DO chief pilot and DOM would handle base inspections.

Asked to identify the director of safety at Liberty, he said that the safety officer was Scott Fabia, who had since left the organization. Asked why Mr. Fabia left, he said he thought he had found another position. Mr. Vellios was told the organizational chart showed a safety officer reporting to the COO, and he asked if he ever spoke with the safety officers. He said yes, just in general. They would discuss the weather outlook, nothing specific to operations. Asked whether he had standing meetings or regular meetings with the safety officer, he said he did not. He did not know off the top of his head when Mr. Fabia became the safety officer. He did not have regular meetings with him.

Asked if he had had regular meetings with previous Liberty directors of safety or safety officers, he said he had. Their previous safety officer would handle a safety meeting with the pilots and leave a summary on Mr. Vellios's desk. Mr. Vellios would read and sign off the summary and ask the safety officer any questions he had. Mr. Vellios would have a quarterly meeting with him. After he left the company, Mr. Fabia became safety officer. Mr. Fabia had not been a safety officer very long, and he had not gotten him on the schedule for regular meetings yet. Tony Pascoe was the previous safety officer with whom he met regularly.

The Liberty managers who oversaw daily flight operations were the DO and CP. Mr. Vellios did not get involved with organizing flights, loading passengers, or the hour-to-hour mechanics of the company's flight operations.

Mr. Vellios was asked if he knew Tyler Fitzsimmons and he said yes. He was a part-time employee at Liberty. Asked why he had been included on an email sent by Mr. Fitzsimmons to Mr. Tramontana providing the names of the passengers on the accident flight, where they were sitting, and their weights, he said he was not sure.

Mr. Vellios was asked how he met his responsibility to establish and maintain SOPs as described in Liberty's general operating manual (GOM). He said he did so through discussions with the DO. Day to day procedures and flights they handled, and if there were any issues they would discuss them with Mr. Vellios. Asked how he established standard operating policies for the flight department he said he did not. Most of the procedures were there before he started. Their flight department had been together for a long time. Asked whether he had been involved in establishing any SOPs for NYONair flights, he said no.

Asked what it meant to say that Liberty was conducting its business in accordance with the corporate charter, he said that probably meant the organizational documents, how the company was formed, its bylaws.

Asked how he determined operational priorities and the course of action that best suited the needs of the company, he said their top priority was to allocate the required number of helicopters to do sightseeing tours from the downtown Manhattan heliport and to determine when it would open and close for the day. A priority was to determine the number of reservations that day and ensure they had enough helicopters available for charter. Asked where FlyNYON fell in the priorities, he said it fell under the charter umbrella. Asked whether NYONair was on the charter side even though they were not Part 135, he said "right."

Mr. Vellios said Liberty had a business contract with NYONair. Asked whether he was aware that the contract stated that it was a charter contract, he said he could not recall the language. Asked what it meant if the agreement said that it pertained to charter services operations, he said it meant providing a customer with a helicopter.

Asked how he ensured that Liberty complied with FAA policies, he said he made sure everybody got the training they needed, based on the feedback provided to him. They never denied anybody training. Each department head was to evaluate staff and recommend what training they would need, if any. Asked whether he was responsible for funding training, he said yes, and making sure it was being done.

Asked how he communicated with key personnel to ensure company policies were being followed, he said in person and by email.

Asked why he was not included in NYONair's pilot safety meetings he said he did not know.

Asked who his safety counterpart at NYONair was, he said he did not know.

Asked with whom he primarily interacted at NYONair, he said the CEO, the CFO Gary (who was no longer there), and Jillian.

Asked whether he had ever heard of shoe selfie flights before NYONair approached Liberty, he said no, but he had heard of doors off flights. He thought the shoe selfies were more of a marketing angle.

Asked to confirm that the organizational chart showed the director of safety or safety pilot reporting to him, he said yes.

He did not know if NYONair had done any risk analysis for the shoe selfie flights.

He did not know if NYONair had conducted a risk analysis of the tether and harness system.

He did not ask his director of safety, safety pilots, DO, or CP to conduct a risk analysis of the shoe selfie flights before NYONair began using Liberty equipment. Asked why not, he said Liberty started doing the flights like they were a new customer. Mr. Vellios asked if there were any issues and nobody brought up any issues and nobody came to him afterward with concerns.

Mr. Vellios was asked whether he was aware of the director of training communicating concerns about the harness, equipment, or training and he said that he could not recall. Asked whether he was copied (along with 15 others) on a response Pat Day Jr. send to Brent Duca where Pat Jr. mentioned that he was insulted by Brent Duca questioning his staff, and where Pat Jr. threatened to leave Liberty and take his business elsewhere, Mr. Vellios said yes.

Asked what he did about that, he said he had discussed it with Liberty's CEO and he believed Liberty's CEO had a conversation with NYONair's CEO. Asked whether he believed Liberty

pilots had a clear understanding about who had operational control, he said yes. Asked why, he said because Liberty was providing their helicopters and their pilots were doing the mission and Liberty was deciding whether to accept or decline flights.

Asked whether he was aware that the NYON CEO had advised Liberty pilots that they were not allowed to question which kind of harnesses were being used on Liberty's flights, he said he was not aware.

Asked whether anyone at Liberty had pushed back against the idea of providing lift for NYONair, he said no. Asked what percentage of Liberty revenue came from NYONair flights at the time of the accident, he said that at the time of the accident, it was a large majority of Liberty's charter revenue, but it was not a large majority of company-wide revenue. It was the first quarter of the year and operations were typically slower then.

Asked how much of Liberty's total revenue he had anticipated would come from NYONair in 2018 (before the accident occurred) he estimated "a little over a million." He added that Liberty's sightseeing business did about 75% of the company's revenue. Charters made up the remaining 25%. Asked whether he expected NYONair would provide 15-20% of Liberty's 2018 revenue, he said no. He estimated 7 to 8 percent.

Asked who owned Liberty Helicopters, he said shareholders. Asked whether it was a public company he said no, it was private. There were about eight shareholders. Asked whether Pat Day Sr. or Jr. were shareholders, he said no.

Mr. Vellios was told about a text Pat Jr. sent to Liberty's director of training where the director of training Brent Duca was defending Liberty's decision not to launch a flight because it was too cold and Pat Jr. told Mr. Duca that Saker had given Liberty a 30-day notice. He was asked what that was about. Mr. Vellios said it was a downtown heliport payment dispute, but it had been resolved. He did not know why Pat Jr. would know about that or bring it up with Mr. Duca. Asked whether the dispute with Saker occurred because Liberty did not have sufficient funds, he said it was a dispute as to when the funds were due, based on payment history.

Asked whether Liberty was in healthy financial condition at the time, he said it was in typical first quarter condition. Asked if he had any concerns about the survival of Liberty at that point, he said no. Every winter was difficult. It had been like that since Mr. Vellios joined the company and every winter they had made it through. The company had been around close to 30 years.

Mr. Vellios was asked who, from his perspective, was the high-level manager or executive who was principally responsible for managing safety at Liberty. He said he thought that as far as aircraft maintenance it was the director of maintenance and as far as flight operations it was the director of operations. Mr. Vellios said that his own responsibility was overseeing them.

Asked whether his role in managing safety at Liberty was primarily overseeing them, he said yes. The director of maintenance was the expert in aircraft maintenance and the DO was the expert in operations and he relied on them. If they had any concerns they would bring it to his

attention and he relied on them to resolve those concerns. Mr. Vellios said he did not know how to fly a helicopter or turn a wrench.

Mr. Vellios was asked to elaborate on a statement on his public LinkedIn profile that stated he had “led charge to create a culture of safety” at Liberty. He said that if there were any concerns that were brought to his attention, his first question was “Is it safe?” They did not sacrifice tomorrow for today. If it was not safe or there was a question about safety, they did not do it.

Asked what safety programs were in place at Liberty, he said that in their maintenance department they had training on tools, equipment, and maintenance. In flight operations they had training on the equipment, and a safety officer to oversee any issues. If any additional programs were requested, they made that happen.

Asked whether there had been a plan to replace Tony Pascoe as director safety after he left, or an intention to appoint someone to that position, he said yes. It was typically left to operations management to identify who would be the right person for that role based on their experience and employment at Liberty. Asked when he had anticipated they would have the new director of safety installed, he said a reasonable timeframe was within a quarter after the other safety officer left, or sooner. Asked whether, at the time of the accident, there was a reason they had not replaced the director of safety for over four months after Tony Pascoe left, he said he was not aware it had taken that long.

Asked if he participated in the quarterly pilot safety meetings at Liberty he said no.

Asked whether he had advocated for any safety improvements, he said that if the safety officer brought any needs or enhancements to his attention then he did advocate for that and Liberty paid for that. Regarding the safety meetings, he would receive a summary.

Asked whether he was aware of an issue with the cutters not working effectively to cut the tethers, he said he was not aware. Asked if he was aware Scott Fabia was researching alternatives to the existing cutters and tethers he said no. Asked whether he was aware that NYONair had committed to buying new harnesses, he said no. He was not privy to any of those details.

Mr. Vellios was not aware of how NYONair’s safety department was organized. He was uncertain about the origin of Liberty’s safety manual. He thought it was developed by flight operations. He thought it was in place before him. Asked how the safety manual was utilized, he said by Liberty’s flight department. Asked who was responsible for updating it, he said he believed it was the CP.

Asked to describe the role of Pat Day Jr. at Liberty at the time of the accident, he said Pat Jr. was a consultant. Asked what Pat Jr. consulted on, he said he had a consulting arrangement with Liberty’s CEO to develop other business opportunities, perhaps in other markets. There was discussion of Miami. Before serving as a consultant for Liberty, Pat Jr. was in charge of Liberty’s charter department. Asked when Pat Jr. left the role of being in charge of Liberty’s charter department, Mr. Vellios said he did not recall the exact date. Asked whether it was in 2017, he said Pat Jr. was disconnected from the charter department to a certain degree in 2017 as

he was handling his NYONair business, but he thought officially it had happened at the beginning of 2018.

Asked whether he had any safety related concerns about the type of operations conducted by NYONair / FlyNYON, he said he did not. Asked whether, to his knowledge, Liberty pilots had safety concerns about NYONair flights, he said he was not aware of any. Asked if he was aware of pilot concerns about harnesses fitting improperly, he said he was not. Asked if he was aware of conflicts between pilots and CX reps at NYONair, he said no. Asked if he was aware of the NYON CEO pressuring pilots directly to operate in cold weather, he said he was not. Asked if he was aware of the NYON CEO pressuring Brent Duca to have pilots operate in cold weather, he said cold weather had come up as an issue. He had discussed it with Liberty flight operations and thought it was resolved.

Asked if he was aware of any incidents involving conflict between passenger tethers and flight controls, he said no. Asked if he was aware of any concerns about the ability of passengers to evacuate a NYONair flight on the ground in an emergency situation, he said no.

Asked to describe his perceptions of safety culture at Liberty Helicopters, he said that his perception was that they were doing everything they could to go above and beyond and they had a top-notch safety culture at Liberty.

Asked for his perceptions of the safety culture at NYONair / FlyNYON, he said he was not aware of their culture.

Asked whether Liberty purchased clothing for the pilots, he said he believed they purchased gloves, but he was not involved in transactional purchasing. Asked whether pilots had expressed a need for other gear, such as exposure suits, or whether he had heard other complaints, he said no, not to him.

Asked if Liberty had a lease agreement with NYONair, he said no, only an agreement for an hourly rate.

Asked if management ever came to him asking about purchasing harnesses or other supplies used for NYONair flights, he said no.

Asked whether pilots were wearing the jackets provided by NYON or liberty on FlyNYON flights, he said he believed NYONair provided some jackets to the crew, but he did not know what jackets they were wearing because Liberty provided clothing as well, like they did for maintenance and heliport personnel.

Asked whether he was aware that Airbus had a suggestion for a guard for the four flight controls on the floor of the AS-350 B2, he said was not aware.

He was not involved in pilot meetings at Liberty or NYONair.

Asked who decided whether to accept flights at Liberty, he said their operations team did. He had had one conversation with Paul Tramontana about pilots being cold and not operating below a certain temperature. Based on that, if it was too cold they did not do those flights. He believed there was a ten-day period at the beginning of January 2018 where they did not do any flights because it was too cold.

Asked whether the DO had made that decision, he said either the CP or the DO. They had an agreement that if it was too cold they were not doing the flights.

Asked who handled passengers NYONair might send to Liberty for regular flights, he said the charter department. Whoever was working there that day. The day to day oversight of the flights on the board and the weather was monitored by Liberty's operations department. If weather was coming in they would cancel the flight or move it to a time outside that weather.

Mr. Vellios was asked if Liberty had ever provided funds for safety officer training and he said yes. If a safety officer went to Heli-Expo and wanted to take a class on human factors or other courses Liberty would provide that. Liberty also provided webinars to all the pilots through their insurance company. They primarily did that in the first quarter because it was slower. They had done a handful of webinars about safety and human factors through USAIG.

Asked whether the safety officer would typically go to Heli-Expo every year, he said yes, typically. Sometimes they would go on their own and if they were taking a course Liberty would pay for the course. Liberty would try to have a couple of representatives there when necessary.

Asked whether he had any information to add that investigators had not asked him about that he would like to provide because it might be important to the investigation, he said no.

The interview concluded at 1122.

22.0 Interviewee: Tyler Fitzsimmons, Flight Operations Manager, NYONair

Representative: Diana Gurfel, Condon & Forsyth LLP

Date / Time: 24 April 2018 / 1305 EDT

Location: Newark Airport, Newark, NJ

Present: Van McKenny, David Lawrence, Bill Bramble – NTSB; Vic Mevo – FAA; Paul Tramontana – Liberty Helicopters; Brian Rosenberg – NYON Air

During the interview, Mr. Tyler Fitzsimmons, age 26, stated the following:

Mr. Fitzsimmons said that he had aviation experience as an FAA-certified dispatcher, and he was a student pilot with 35 hours of flight time. On the day of the accident he was working for both NYONair and Liberty Helicopters in the flight operations department. He was on NYONair's salary and was paid hourly by Liberty. His title was Flight Operations Manager at NYONair, and he was in the flight operations and charter sales department at Liberty Helicopters. As a Flight Operations Manager at NYONair he reported to Ethan Fang, the director of ground operations, and Brian Rosenberg the chief pilot for anything he needed. For Liberty he reported to the chief

pilot (Paul Tramontana) and the director of operations (Pat Day Sr). Duties as flight operations manager included building a schedule from their booking source, assigning aircraft and pilots to those flights, flight following, helping in analyzing weather, communicating with pilots and maintenance. Anything the pilots had an issue with, he was their go-to guy. For Liberty he scheduled and helped with providing weather information to pilots, passenger information, booking charters, taking phone calls, and coordinating with Paul and Pat Day Sr. on any operational control issues. He was the middle man between the pilots and maintenance, and between maintenance and management.

When asked about his work schedule he stated that once he started full time at NYONair he pretty much stopped working with Liberty, such that he was only working Sundays for Liberty. During that time of year there was not much volume and monitoring the 0-3 three flights a day that Liberty had on those Sundays did not affect his work load. He started working for Liberty in a part time capacity in March 2016 and he started with NYONair in August 2017. On days off from NYON, if Liberty needed manpower, he would put in his request to work. He had no collateral duties with NYON. He didn't handle passengers like the other departments. He had no collateral duties at Liberty. He had only worked in the operations department for either company.

His typical shift for Liberty would consist of arriving between 0630 and 0800 for commuter flights which were the earliest flights, and he would work until the day was closed out. The schedule varied daily, sometimes the last flight was at 1700, other times he was there until midnight. His day at NYONair started at 0900 and went until the completion of all the flights. The last helicopter that landed was when he was done for all flights, both part 91 and 135. His duties at NYONair involved pulling all of the bookings and putting them onto an easy to read schedule and assigning aircraft and pilots to those flights. During the day when he had passengers that were ready, he communicated with the pilot, ensured the aircraft was fueled and ready, and then sent the pilot the flight sheet that had the passengers' seating and weights, so the pilot could confirm the weight and balance. That gave the pilot time to catch any issues. Most of the time it was not an issue because he knew how to load the aircraft. He notified the pilot that passengers were coming, and the pilot greeted them on the ramp for the briefing. He followed the flight, established communications on departure, en-route, and landing, and any issues in between got fed to him; passenger equipment or maintenance.

Mr. Fitzsimmons was asked if there was any written guidance for his position, and he stated that there was an employee handbook for Liberty and a handbook and a fact sheet listing of some of his duties for NYON. For Liberty the handbook was just general, it did not break things out by department. He knew his duties as they were passed down to him from management. He could not recall if there was any written guidance regarding operations duties. NYONair had an employee handbook and he had browsed the operations specifications for the company. His training consisted mostly of on-the-job-training (OJT), and he had gained more knowledge when he went through flight school and dispatching while working for Liberty. NYON provided OJT with Nick. It was a different company. Many things were different, but he carried his aviation knowledge over from Liberty to NYON. He had not received any formal training from NYON.

When asked how much authority he felt he had as a dispatcher for NYON, he stated that he had enough authority with the help of the director of operations and the chief pilot to make any decisions that needed to be made. He was confident he could solve or help try to solve any issues that happened. Depending on what the issue was, if it was beyond his authority, then it always went up to higher. For example, if he had a question regarding a heliport, someone's property, or something regarding airspace that he did not know, he would go straight to the DO or Chief Pilot and ask them. If it was something small and miniscule, that was what his job was for, but if there was anything regarding safety or anything that was beyond his knowledge, he would always seek more information from higher up. Issues with passengers or equipment always would come to him. He would analyze the situation and if it was more than he could control, then he would bring it to someone higher up. When asked if he could cancel a flight, he said no. He did not have operational control, so he could not cancel a flight, but he could make recommendations. When asked what he would do if a pilot called in and said conditions were not good for flights and recommended canceling, he said he would look at the pilot's recommendation, analyze the situation, and contact the chief pilot and DO. At NYON, Ethan Fang would also be involved because he was the head of the department. Mr. Fang would be the first person to be consulted. From there they would work as a team and continue to work up the ladder.

He was asked to describe the steps involved in a flyNYON flight from his perspective. He stated that the passenger would arrive and wait for the safety briefing, after the safety briefing, the CX team let him know that the passengers were ready to go. The CX team filled out the sheet indicating where the passengers wanted to sit and describing their points of interest. When he got that paper, he knew that the passengers were ready. He revised it and sent it to the pilot. The pilot would acknowledge, state that he was fueled, and ask him to send the passengers down. He communicated to the CX team that they were released, and they would then go to the heliport and be greeted by the pilot. The pilot handled it from there. Mr. Fitzsimmons was never brought back into it unless there was an issue on the ramp. Mr. Fitzsimmons then established communications on departure, en route, and landing, and watched the flight throughout.

After landing, the passengers were unloaded and hopped back into the van and were transported to NYON's location at Kearny Point. When asked how the passengers were scheduled, he stated that the passengers booked flights through NYON's system. The day before, he would open that system and start consolidating passengers into flights. He moved passengers around if needed and he created flights. That information was transferred into their other schedule that was easier to look at, and flights were assigned to pilots and tail numbers. If he was working for Liberty, he would receive the flight build from NYON Ops minus the pilot and tail numbers, and he would accept or reject flight based on Liberty's availability and assign pilots and tail numbers. The flights Liberty could not take would be relayed back to NYON Ops and rescheduled or something like that. Originally Liberty Ops was located at the Liberty hanger, and the volume of communication needed between Liberty ops and NYON Ops became almost a barrier. The Liberty Ops person needed to be in the same location so that they did not need to be constantly calling and texting each other all day. Once Liberty Ops moved over to the NYON Ops facility, it helped communications a lot. He could not recall when exactly the move of Liberty Ops to the NYON Ops center happened, but once it happened communications between the two improved.

Mr. Fitzsimmons was asked what procedure he would follow as the NYON Ops representative if an issue with passenger equipment occurred at the helipad, and he stated that the pilot would tell the CX team, then contact Liberty Ops, and then the information about the issue would be relayed to NYON Ops. NYON Ops would also receive the information about the issue from the CX team. Once the equipment issue was resolved, the pilot would give a thumbs up to Liberty Ops, and Liberty Ops would relay to NYON Ops that the flight was ready to go.

He was asked if he had ever seen a conflict between Liberty pilots and CX personnel, and he said that he had not witnessed anything, he had just heard about it if a pilot had an attitude towards a CX. On multiple occasions he had heard that pilots were grumpy, or he had heard about the moods of individuals. Some passengers were nervous and expected a level of professionalism and personality to greet them and make them feel comfortable. If a pilot did not do that, which had happened, then the bad reviews started to come in. NYON did not want those pilots flying flyNYON passengers, so a request would be made to Liberty to not have those pilots scheduled for flyNYON flights.

He was asked if there was any conflict between Liberty pilots and NYON Ops personnel, and he stated that there was some conflict because the pilots did not understand how the operation worked and they expected one person in ops to control absolutely everything. It was not a major issue, but sometimes the Liberty pilots called him directly when he was working for NYON Ops and asked him to resolve issues that he had no control over. There was some hostility at times. The pilots just did not understand what his duties were. It did not happen for a while, but once the pilots became irritable it happened often. The pilots were great at first, but once the volume of flights increased, it was hard for the pilots to do new things.

The Liberty pilots were used to doing charters and doors on tours in New York. Comparing both companies, Liberty would do tours all day and did not care about the customer like NYON does. These pilots do not really have the background to come into NYON type flights. They were usually good at first but by the third week of doing NYON flights they were irritable, mean to the CX team, or sleeping at the helicopter upon arrival of the passengers. After a while the Liberty pilots were hard to deal with. There were a couple that maintained the proper bearing, but most of them gave in. This occurred as the flight tempo increased it was hard to find pilots who wanted to come to work wanting to fly. He always had an issue with Liberty pilots, it was tough to find someone to hustle to do any flight. At first, they were good, but after a while they went back to their old ways because now they "had to work." The customer wanted a happy professional pilot, and when they saw the pilots sleeping on the floorboards it gave a poor impression.

He was asked if he knew about the different kind of harnesses, and he said he was not too familiar with actual harnessing. He knew they had used the yellow harnesses for a long time with no issues until the blue one was introduced. The pilots demanded the use of blue harnesses because it was easier for them (the pilots). NYON implemented it on the smaller passengers. There were not any major concerns for the yellow harnesses. He was never directed to change scheduling based on harness type. The concern was never safety. The only reason for their preference was that the blue harness was easier to use. If there was a real safety concern, the pilots would have refused the flights.

He was asked if he was involved in the safety meetings, he replied that if he was in operations and had time he would listen in on the pilot meetings.

Mr. Fitzsimmons was asked if he was a licensed dispatcher, he replied that he was an aircraft licensed dispatcher and that he had been trained at Flight Safety International in Flushing. He had 35 hours of fixed-wing flight time. He had never gone through a full day of flying like the pilots he worked with did.

Regarding the harnesses, he was asked if there had been complaints involving the use of the blue harnesses, and he replied that some of the Liberty pilots preferred the use of the blue harnesses, and that the blue harnesses should be used whenever possible. There was never an issue with the yellow harness, no complaints, none of the NYON pilots complained. Once the blue harness was introduced, the pilots thought the harness was easy, easy on the little people, and that was when they voiced a preference for the blue harness. When asked if there was a NYON corporate policy to use the yellow harness prior to the blue, he stated that they would use the yellow one, and use the blue one on smaller people. He did not recall if he was on a call where a pilot was requesting the use of blue harness on someone other than a smaller person.

He was asked how he could attest to the safety of the yellow harnesses since he was not an engineer, and he replied that he knew from other people in the longlining and construction industry that the yellow harness was more than capable of holding a passenger in the helicopter. It was capable enough, and nothing said otherwise. Asked if he had gotten guidance from Pat Day Jr about the harnesses, he stated that the only guidance he got from Mr. Day was that they were to continue to use the yellow harnesses and to use the blue harness on the smaller passengers. NYONair had more of the yellow harnesses because they had been in use the longest and the blue harnesses had just showed up at some point. The blue harnesses were much easier to use, and he thought the pilots preferred that harness because for smaller people they could get it tighter and it was easier to use.

Regarding the safety meetings, Mr. Fitzsimmons stated that he attended those via phone, and that he was on many of the calls. Usually the head of the Ops group would also be on the call, so it would be himself and Nick or himself and Ethan.

He was asked if he was working on the day of the accident, and he stated he was. He was working as the Flight Operations Dept for NYONair and the Flight Operations for Liberty. He was handling both positions at the time of the accident. The volume of flights for Liberty for that day was very low, around 3 flights for the day, the whole schedule for Liberty that day was NYON flights, so he didn't have much to do, and he was able to balance working both the NYON and Liberty flights fine. He stated he was not sure about how many flights Liberty had scheduled, but it was between 0 and 3, and the rest of the Liberty flights were flyNYON flights. He was asked if he typically worked or tracked multiple flights, and replied that he did. He was tracking all three flights that took off in sequence the evening of the accident. He flight-followed by using Spidertracks, ADSB, and the radios. He was the only one working in the Operations Center at the time, Ethan might have been there, but he could not confirm that. When asked how he tracked multiple flights, he stated that he typically tracked more than that, and 3 flights was

“nothing.” Four to 6 was not unusual. Tracking 3 flights was simple, one took off after the other, he established communications with the first, then the next one a minute later, and the next one a minute after that, and he was watching them on radar.

He was asked for his opinion, based on his experience, if he had a phone with two blinking lights, one light was Pat Day Sr and the other was Pat Day Jr, which one would he answer first, and he replied that he would answer Pat Day Sr and Paul (Tramontana) first because they had operational control of the flights. When he heard the mayday, he notified them immediately and notified Pat Day Jr after the fact. He contacted Pat Day Sr and Paul immediately, and let them know they might see an SOS from Spidertracks, he said he sent that to Liberty’s operational control. He got a couple of calls from NYON but he did not answer them because he was on the phone with Paul. He said that NYON was kind of blind, they kind of knew what was going on, but he too was busy talking to Paul and Pat Day Sr to get things figured out. When asked if there was an emergency response plan, he stated that there was, but that he did not refer to it because he knew who the first two people he needs to call were, so he did not refer to the plan. When he heard the mayday from 0LH he was not sure if 0LH had declared the mayday or was repeating a mayday for another aircraft. He let Paul and Pat Day Sr know that 0LH had transmitted a mayday. He gave Paul and Pat an early warning of the situation but did not follow the emergency response plan step by step. When asked to clarify, he said that there were duties for him to follow in the emergency response plan, but he did not refer to the book and handled the event in real time.

He was asked why he said that Liberty pilots liked the charter flights and did not like change, and he replied that he had experienced personal brief comments from the pilots expressing exasperation, or questioning “why”, or asking “what about him”, or “I want to go on charter,” stuff like that.

When asked how many pilots were at Liberty, he stated that he didn’t know the exact number but probably 10 to 12. When asked about how many pilots at NYON, he stated that he thought it was around 5. There were more pilots at Liberty. Under most situations, the pilots at Liberty were conducting most of the flyNYON flights. He was asked to recall how many aircraft Liberty had, and he replied that they had 7-8, and that NYON had 4-5 aircraft. NYON had about half the pilots and half the aircraft that Liberty had. He was asked if the Liberty pilots had more experience flying the flyNYON flights, which he replied that was correct in some cases, the NYON pilots had been doing the flyNYON flights for a longer time and had more experience. The Liberty pilots went through the training with the NYON pilots and were slowly introduced to the flights before they were given back to back to back flights.

Mr. Fitzsimmons was asked if he had gone through any of the CX training, and he replied that he had observed the training but generally he was not involved in that. He tried to stay on the aviation side of the operation, even though the pilots would contact him with passenger issues. In that case he would refer the issue to the appropriate person or try to solve it himself. He was never formally trained how to use the harnesses, tethers, carabiners, or knives.

He was asked what radio frequency he monitored when tracking a flight, and he replied that he monitored the company frequency, and that was where he heard the mayday relayed from the other aircraft.

He was asked about the evolution of the cold weather limitation, to which he replied that for a while they were trying to identify a temperature and it went back and forth for a while, but eventually they settled on a number where they would not do the flight if it was at or below that number. This applied to Liberty. NYON would schedule flights for Liberty, and at Liberty they would be monitoring the temperatures, and if it was below the temperature limit they would tell NYON that they were not going to do the flights, and NYON would then either cancel it or do it with their own pilots. The temperature limitation did not evolve too much, maybe 5 degrees. There were still passengers that wanted to fly that were adventure seekers, and Liberty was not doing anything, they were not making money, so they were adjusting standards for the comfort of the pilots. At Liberty if it was below a certain temperature they would tell NYON, thanks for the business but that they were not taking the flight. NYON then would put doors on their aircraft, reschedule, or they would take their own aircraft. Pat Day Sr at Liberty made the decision as to what the temperature limitation was. When asked if there was conflict between NYON and Liberty about that threshold, he replied that he did not remember much. He just remembered that sometimes the pilots would get cold and they wanted high numbers. The companies found a threshold that was comfortable for both the passenger and pilots. That was where Pat Sr. put the line. Pat Sr. set that threshold and Mr. Fitzsimmons knew what it was and scheduled accordingly.

He was asked who was responsible for managing safety at Liberty and NYON, he replied that at Liberty it was Pat Day Sr and Paul (Tramontana). At NYON, safety related issues went through a combination of Ethan, Brian, Christi, and Pat Day Jr. It was a group discussion. When asked if he had any concerns with the flyNYON flights, he said that he had no concerns, and if there had been concerns the flights would have been stopped.

When asked if he was aware of any conflicts between the tethers and the flight controls, he said that he was not aware of anything like that.

When asked if he was aware of any concerns before the accident about the ability of the passengers to evacuate the helicopter on the ground in an emergency situation, he replied no. He was not concerned. He did not recall hearing any concerns from others about it either, other than the pilots wanting to use the blue harnesses. If there had been a concern, he did not think the pilot would operate the flight. He had seen nothing that was a “red flag” or something critical that would have necessitated a halt in operations.

He was asked how he would describe the safety culture at Liberty, and he said that he did not recall any safety issues. If there were any issues they would usually call Paul or Pat, or maintenance. At one point, a year or two ago, they sometimes would pop the floats in the hangar. They (pilots) had not gotten to do that before, and it was cool, everyone was around it and got it on video. From what he understood, there was a malfunction with the floats, which was funny to some. In that case, safety was a concern. Besides that, no one disregarded safety. He was asked to elaborate on the malfunction, he replied that he was new to the company at that

time. One day at Liberty, people were excited because they were going to pop the floats in the hangar to test their capabilities, however, there was a malfunction, and everyone thought it was a funny joke. Looking back at it now it probably was not very funny, and it should have been taken more seriously. Aside from that event he did not have much else to question. He knew that the training captain took his job very seriously. The float test happened right when Mr. Fitzsimmons was starting, in late 2015 or early 2016.

He was asked again about the safety culture at NYON. He stated that NYON took safety seriously. They were always ordering new equipment and testing new equipment. They had won a safety award from the Eastern Region, so it was “pretty noted” that they went above and beyond to be safe with their capabilities. He could not recall an instance where he had questioned the safety and credibility of the company. They had always strived to be the safest they could. He was asked if he was in on the discussions regarding the cutters and tethers being incompatible during NYON pilot meetings, and he stated that he had been on quite a few of the calls but he did not recall any discussion about the cutters or the tethers.

He was asked if he recalled the tail number of the aircraft that had had the float test malfunction, and he said that he did not know which aircraft it was.

Regarding his experience with the harness, knives, and tethers, he said that he had only observed their use, he had no experience with them, and he had never assisted a passenger with donning the equipment. He had never had a safety concern with NYON or Liberty, other than the issue with the floats.

He was asked if he had actually witnessed the pilot sleeping on the ramp, and he said that he was not at the ramp but believed someone had video of a pilot sleeping on the ramp. Asked if he thought that was a safety concern, he said that it was a safety concern. He had had a conversation with the pilot, asked what was going on, and asked if he needed to get a new pilot so the sleeping pilot could be released for the day. The pilot responded that he was just laying back and closing his eyes while he waited for the group. Mr. Fitzsimmons had not found out about this instance until after the pilot had flown the flight. It was a little bit alarming, especially to the customers. Mr. Fitzsimmons was not on the ramp, so it is difficult for him to know what was happening there.

He was asked if he knew what the exact malfunction of the floats was, and he stated that he was not actually at the test, but he had heard about it. It was the talk around the company. He was not actually familiar with the apparatus, and he believed one section of the system did not inflate. He believed Kai, Vance, Beau, Kwas, and possibly Duca were there during the test.

Mr. Fitzsimmons was asked if the float test was a maintenance inspection or was just for fun, and he replied that, as he understood it, it was a maintenance inspection. Maintenance had sent out a group text saying they were going to pop the floats and that people were invited to watch. He could not recall the date, maybe late 2015 or early 2016. There was a video of the test. He thought one of the pilots took the video. He had not seen the video, but he knew Kai had seen it. He knows Kwas was there, Duca may have been there, Rick Vance was there, and the maintenance team was there.

He was asked to confirm that he did not witness the float test, and he said that he did not witness the float test, he just heard about it.

He was asked if there was anything he would like to add or if there was something he thought the investigation team should know, and he replied that he did not have anything to add.

Interview concluded at 1434.

23.0 Interviewee: Kai Cowley, Liberty Helicopters Operations Department

Representative: Diana Gurfel, Condon & Forsyth LLP

Date / Time: 24 April, 2018 / 1430 EDT

Location: Newark Airport, Newark, NJ

Present: Van McKenny, David Lawrence, Bill Bramble – NTSB; Vic Mevo – FAA; Paul Tramontana – Liberty Helicopters; Brian Rosenberg – NYON Air

During the interview, Mr. Kai Cowley, age 29, stated the following:

When asked to describe his work history, Mr. Cowley stated that he had been an electrician since he was 16, until he was hired by Liberty Helicopters 5 years ago. He was in the food and beverage industry for a little while, and skating rink for a while. He was hired by Liberty about 4 and half years ago, in the fall of 2014. He had no aviation experience. He worked for Liberty Helicopters until last Saturday, and now worked for NYONair. At Liberty he was never officially given a title, but he worked in dispatching.

His duties in the Operations Center was to build a working schedule, taking on flights, building a roster, and once the roster was built, assign pilots and tail numbers. After that he would flight follow the aircraft while they were on their missions and set up the schedule for the following day. He was asked if he had any collateral duties, to which he stated that he had some involvement with billing under Phil Montero, his direct supervisor. He had worked in the operations department in a full-time capacity since hired by Liberty.

When asked what training he received for his job, he stated that he received 3 months of one-on-one training with Phil, and at the time there was another pilot there, Ian Michaels, who ran the operations department. He was with one of them at all times for 3 months. If there was something that he didn't know, he could always get in touch with Paul (Tramontana), Pat Day Sr, Pat Day Jr, or one of the pilot's Paul trusted to help make decisions at the time. For the first few months he was contacting Phil multiple times a day until he learned how to consolidate down and how to prioritize what needed to be answered immediately and what could be answered later. Typically, Phil was his primary "go-to" and then Paul, and rarely Chris Vellios as a last resort, because he had full control to make a decision and say they could do something.

His typical shift was two 12-hour shifts, and two 8-hour shifts, on a four-day schedule, with the occasional 5 days; Monday, Wednesday, Thursday, Friday. If a 5-day shift was necessary, he would cover wherever that was needed. Off season, Memorial Day to Labor Day, he did not

work the 5-day week often, but when in season, 5 days was the norm, with the occasional 6-days on.

When asked if there was any written guidance for his position, he stated that there was not. The only thing was an Excel sheet that Phil had created for him that had a list of things to do at certain times, a general outline of what was expected each day. He was asked what kind of authority he had in his position, and he stated that he was allowed to schedule and assign pilots to missions, but if beyond that scope, if pilots had a problem with the missions they would let him know, and if there was something that was not normal he would reach out to Paul or one of the department heads for a decision. He was asked if he could cancel a flight, and he stated he would check with his department head, Paul, Pat Day Jr or Pat Day Sr depending who was available at the time.

When asked what his chain-of-command was, he stated that he was told that he had operational control, and that he could schedule and dispatch pilots. If he gave them a mission, they were expected to complete the mission. He could make cancelations or changes to missions. His job was to juggle the balls they had for the day, be it aircraft, pilot duty times, pilots who were checked out in certain machines; he took all the pieces and made a functioning working schedule with what he had. For complete cancelations he had to check with Pat Day Sr, Pat Day Jr, or Phil, but to move the flights, delay flights, or if the client canceled a flight, he could do those things.

When asked to clarify Pat Day Jr's role, Mr Cowley stated that when he was hired Pat Day Jr was the Liberty Helicopters charter manager for the first 1-2 years that he worked at Liberty, and that on a daily basis he and Phil reported to Pat Day Jr, and ultimately, they all answered to Pat Day Sr who was the DO.

Mr. Cowley was asked how Liberty would get the flight requests from flyNYON, he stated that initially they would just text it to him; flights, times, and duration. He would build it into his schedule, plug in pilots and tail numbers, and figure out a functional schedule. That evolved from a text thread into their board, and they would send a screen shot to him. He would copy it over and fill in what he could, turning away what he could.

He was asked if there was a problem at the ramp with one of the passengers what would the process be, he replied that the pilot would relay the problem to him, he would relay that information to the NYON team to resolve. As that relationship evolved, they would communicate with the CX, and then direct to him, he always had to know because he had operational control. Sometimes the CX would communicate directly with him and he would coordinate with the pilots.

He was asked if he had any knowledge of conflict between the Liberty pilots and with both Liberty Operations and NYON Operations, and he replied that he never had conflicts with the pilots. On the NYON side he could not say anything with accuracy, just what he had heard between passengers and pilots. When NYON would schedule flights and things would change, the pilots would not always like that things were changing, because sometimes they would get

more flights or less flights and did not like what the other ops team was giving them. To him that was not a justifiable excuse to be angry with another center.

Mr. Cowley was asked if he had knowledge of any conflicts between the Liberty pilots and the NYONair CX's, and he replied that he had heard of times that they (pilots) did not have what they needed it would get vented at the CX when it really was not their fault. Other than the occasional outbursts, which even occurred in his department when things were not going well, there was nothing that was outside the spectrum that was normal to him.

He was asked what he was told about the different harnesses, and he said that he did not hear about the harnesses until just over 4 months ago, he did not even know the other ones existed. He heard that that they had gotten smaller harnesses and that the pilots liked them better, but he understood that the yellow harnesses were just as adequate to perform the task. It started that one or two of the pilots had mentioned that they liked it, and then as they started talking about it, more of them liked it. When asked if he knew of any flights that were delayed because of harness issues, he stated that there were multiple. It was a combination of if the flight ran late, sometimes they were waiting on harnesses to come back, had to wait for harness to become available because there was a limited number of harnesses. There were a few instances where pilots wanted the blue harnesses and that they would not take the flight unless they had the blue harnesses. In that case he would contact Paul, but it only happened a handful of times.

He was asked if he was involved in the pilot meetings, he stated that he was usually told about the meeting as a third party, after the fact by Paul, Phil, or Jr. Sometimes he was on the pilot meeting calls and he would relay the information back. It depended on whether he was on duty when the meeting occurred. If it held higher importance they would schedule the meeting when they were all there. Typically, it was via third party.

He was asked if there were any Liberty pilots who were not to be scheduled for flyNYON flights, he replied that there was one pilot, and that Paul had told him not to use that pilot. This occurred between one and two years ago, her name was Kaylyn Libolt and that restriction was lifted at some point.

Mr. Cowley was asked to expand on his comment that there was no written guidance for how to perform his job, he said that he had trained two other people below him, and as it was for him, it was all experience knowledge, it is physical experience that just had to be learned. A lot of it was on-the-job-training (OJT). He said that there was no recurrent type of training for his job.

He was asked where he was at the time of the accident, and he said that he was in the ops center. At that time, he reported to Pat Day Sr and Phil Montero. His day to day supervisor was Phil, if it got too outside the spectrum, Pat Day Sr would step in. After his initial two years at Liberty he no longer reported to Pat Day Jr. He reported to other people after that. When asked if the NYON CEO contacted him while he worked in Liberty operations, he said other than the CEO asking him to service one flight over another, he did not have communications with the NYON CEO. When asked if he knew of any direct communications between Pat Day Jr (NYON CEO) and Liberty pilots, he said no.

When asked to explain what he meant when he said he had operational control, he said that he was able to tell that pilot and that aircraft where it could go. Directing where aircraft could go, would fall upon anyone in the operations department, and that was for part 91, 135, and 136. The only situation where he did not have direct control of aircraft was the sight-seeing department. When he dispatched sight seeing aircraft, they would run generic tours, but he could still pull the aircraft out of tours, send them on missions if necessary. The others in the operations center had the same authority, Phil, Tyler, Ian Michaels, & Kristi Gresham. He was listed by name in a book with the title that he has operational control of the fleet, however he did not know the book number or the page number. He believes it is a Liberty manual, and when he was going thru training for Blade, he went through it with Pat Day Sr to ensure the list was up to date and the correct people were added. When asked if he had seen the Ops Spec, he said that he had. When asked if he was listed in the Ops Spec, he said that he was prior to Saturday, and does not know if he still is.

He was asked if he had ever seen the FAA out there, he replied that he had seen FAA on multiple occasions, they would stop by and look at the board. Paul would typically introduce the FAA inspectors to him when they were visiting. He could not remember names, he had seen the FAA there about 8 times since he has been there, and they usually come in groups of two. They usually would stick their head in, say hi, looking for Paul. He could not recall the most recent time he saw the FAA prior to the accident, possibly over 8-9 months ago.

He was asked to clarify that he did not have a dispatcher license, never been to dispatcher school, and no pilot license, he said that was all correct.

He was asked to explain his comment that the yellow harnesses were just as good as the blue harnesses, to which he said that since he was 16 he had worked as an electrician, and that he had been in and out of those harnesses many times, and he trusts them to save his life. He would do crane work for lighting and would be in and out of that type of harness all day, 12 hours a day. He was asked if he had a structural engineering back ground, he said no. He was asked if he knew the load testing capabilities of the straps, belt system, or load system of the harness, he said no. Asked if he knew strength characteristics and engineering capabilities of the tether, he said no. He was asked where the tether system was attached to the aircraft, and he said to a hard point that had a load test on it, but he did not know the specific load test numbers.

When asked if he was aware of any practical exercise of using the existing knives to cut the existing tethers or harnesses, he replied that he had never seen anything other than the safety video that shows this, and it shows a passenger seated with a tether attached to an aircraft. He was asked if he was aware of any risk analysis performed by either Liberty Helicopters or NYONair, to which he said that he was not aware of any of that and was not a part of anything like that. He was not aware of Liberty or NYON conducting any type of passenger egress test. Other than the pilots preferring the blue harness, he was not aware of any concerns regarding the harness, tether, carabiner, or knives, among passengers or employees.

He was asked if some pilots were more insistent regarding the use of the blue harnesses over the yellow, and he stated yes, that those pilots were Brent Duca, and Scott Fabia. No flights were canceled but some were delayed because the pilots wanted to use the blue harnesses, which were

on another flight at the time, so they had to wait. When asked if there were any specific pilots who did that, he replied Scott Fabia, and no one else that he could recall.

Mr. Cowley was asked if was aware of there was a float activation test that took place late 2015 or early 2016 that was not successful, to which he replied yes. It was something that really excited the pilots that this test was going to be performed, they were drawing straws to see who was going to blow the floats. He did not witness the test but saw a video of the pilots with an aircraft with the nose facing into the hangar and the tail facing the door. There were a number of pilots around it, there was a count down, they pulled the system, and he thinks 4 out of the 6 floats deployed. One of the floats partially deployed, and the other sputtered to inflate at all. He went to the hangar the next day, saw the system removed from the skids, and he asked the mechanic what the cause was. The mechanic said that when passengers get on and off the helicopter the mistakenly step on the float system thinking it is a step. Mr. Cowley was asked if he had received a further explanation for the partial inflation and he said The mechanic stated to him stated that it was not the activation mechanism not or the materials, but there were other factors issues that could have been a cause. Stepping on the float can damage the back, or the actual float itself in some instances of the float. He could not recall which mechanic he talked with. He was not present at the test, but the people he could remember that were there off hand were Rick Vance, Kayla Libolt, and a couple other pilots. They moved the schedule, so more pilots could attend the test. When asked if he had any concerns as a result of the test, he stated that it did not even dawn on him what had happened. He presumed the test did what exactly it was meant to do, it had caught a faulty system, and now it was going to be sent out for repair.

He was asked if he knew when the next prior float test had taken place, and he replied that he thought it was just about a year after he started his employment, they had to do a similar test on a ship that they managed, and it did not dawn on him why people were so excited about the test until he saw the second test. He had heard that test was also a partial float deployment. Type was a AS350B2, aircraft number 212K. It could have been a B3, he was not sure. He was asked which pilot showed him the video, but he recalls seeing two different perspectives from two different pilots.

He was asked to clarify these events, to which Mr. Cowely said that there were two events. The first happened when he had been employed for about a year, and that was a B2, tail number N212K. The second event occurred about 2 years later, which had the two videos that he saw. He estimates the first was winter of 2015 (212K), and the other one, it was sunny, maybe spring time, maybe late 2016 or early 2017. He was not aware of a third test.

He was asked if there was anything he would like to add or had any questions for us, he replied no.

Interview concluded at 1541.

24.0 Interviewee: Ethan Fang, NYONair Director of Operations

Representative: David J. Harrington, Condon and Forsyth LLP

Date / Time: April 25, 2018 / 0902 EDT

Location: Doubletree Hotel, Newark, New Jersey
Present: Van McKenney, David Lawrence, Bill Bramble, Emily Gibson (by phone) – NTSB; Victor Mevo – FAA; Paul Tramontana – Liberty; Brian Rosenberg – NYONair

His name was Ethan Fang, and he was 23 years old. Prior to his employment with NYONair, he was with Blade for about 3 years as a charter arranger, and prior to that he was a student at New York University. He was hired at NYONair October 3 or 4, 2017, and his current title was Director of Operations. He had no prior aviation experience, and no pilot certificates or flight time.

His duties and position in the operations room included managing the operations scheduling team, customer service team, and prior to the accident he managed their customer service team for ground operational flow. He had additional responsibilities on the sales side to ensure their brand was positioned in the proper way. He managed a lot of projects involving those sorts of things.

On a daily basis in the ops center, he would usually sit in tandem with whomever scheduled for ops that day. That was mainly to oversee and make sure everything was going right. Nothing would come to him unless everything was not going right with customer service. He acted as a coordinator and logistical liaison for their ground and scheduling staff who communicated directly with pilots. When asked how much time he spent in the ops center daily, he said it would depend. Thursday through Sunday, it might be 8-9 hours, and on the other days when there was a cluster of flights around sunset, just a few hours. The remainder of his day involved other meetings. His typical daily schedule was to arrive about 0900-0930 and wrap up an hour or two after sunset.

When asked if there was any written guidance for his position, he said nothing formal. He had not received any formal training from NYONair. Asked how he got the skills needed to manage the ops center, he said a lot of the duties in the ops center involved logistical coordination and those duties just required a person who was good at communicating under stress and had a numerical logistical mind. When he was at Blade, his job had also involved a lot of scheduling to ensure minimal customer delays. His time at Blade had really helped dress him for his role at NYONair. When asked if most of his training and experience had been on-the-job training, he said yes.

When asked how much authority he had in his position, he said he had full authority over customer communications and the policies that they implemented to ensure a good customer experience. He also had authority over the scheduling of their operations staff. When asked if he could cancel a flight, he said no, that was the pilot's decision.

When asked how the NYONair ops center coordinated flight scheduling with liberty, he said they had an internal booking system which created the schedule. Based on that schedule, they decided which trips need to be serviced by Liberty. They would request the trips Liberty was to perform through Liberty operations. When asked if there was any type of guidance or restrictions as far as what flights Liberty could do or be assigned, he said it was entirely up to Liberty operations. NYONair would send Liberty their schedule and Liberty would let NYONair

know which flights they could do. Mr. Fang said that if there was a situation where he need further guidance, he would call Jill or Pat Jr. or Brian. Mr. Fang reported directly to Pat Jr.

When asked to describe the typical process for scheduling and tracking a FlyNYON flight, he said a flight would be booked and added to their roster. NYONair would assign a pilot or tail number if it was going to be operated by NYONair, or Liberty would provide that information if the flight was going to be operated by one of their helicopters. NYONair monitored the flights via radio or Slack for the takeoff and landing. He said the NYONair pilots used Slack. Asked whether NYONair pilots used Slack in flight, he said not that he knew of. Asked whether they only used Slack on the ground, he said yes. Slack was only used for NYONair flights. Liberty tracked their own flights.

When asked what process was followed if there was some sort of issue on the flight line, such as a passenger issue or equipment issue involving a flight operated by a Liberty pilot, he said that if a Liberty pilot was not comfortable with the equipment a passenger was wearing, each group was accompanied by a NYONair CX representative. The pilot would first communicate that information to the CX. The CX would communicate it back to his or her team. NYONair ops would hear about it via radio, and they would look for a solution. He said the NYONair operations center had its own radio frequency and the CX's could all hear that frequency. The frequency dedicated to the CX and ground operations was different from the frequency for the pilots. Asked whether the NYONair operations center would first receive information from the CX, he said occasionally a pilot would call NYONair or Liberty operations directly, but mostly they would hear about it through the CX.

When asked if he had any knowledge of any conflict between pilots and NYONair ops personnel, he said no. When asked if there had been any friction between himself and the Liberty pilots, he said certainly not. When asked if there had been any tensions between the CXs and the Liberty pilots, he said yes, there had been tension. Most of that came from the customer experience culture. The CX priority was safety as number one, and beyond that making sure that every customer was having a good time and taking away a good experience. There were certain cultural mismatches with certain Liberty pilots. Often times, the CX would have to make things right because of a poor customer experience on the ramp or in flight.

When asked if it was a few Liberty pilots that the CXs had issues with, or all of them, he said there were a few pilots they had recurring issues with. In some instances, pilots were taken off FlyNYON flights. In others, NYONair would bring the issue to Liberty ops and speak with the pilot and try to get the full story and work on it that way. When asked how it was resolved if there was a Liberty pilot NYONair did not want to have flying the FlyNYON flights, he said that if it came to that, someone would call Paul Tramontana directly, or they would call Liberty ops and have them relay the message.

When asked if he was aware of the differences between the two harnesses, he said he was aware of differences with the two different types of harnesses. He said he did not take ownership of characterizing them, but he was aware of them. When asked if he was aware of discussions about the harnesses and the processes to use them, he said yes. He knew that through the pilot meetings. NYONair had bought a few of the new blue harnesses so people could get hands on,

test them out, and see if they liked them. It was decided they would shift toward the blue harnesses with the better fit and more tether points. The process was that they would filter out the yellow ones and move forward only with ordering the blue harnesses. He did not remember when that decision was made. When asked who made the final decision that blue harnesses were going to be purchased going forward, he said he thought it was Pat Jr. and Jill.

Asked how far along in the process they were with purchasing the blue harnesses and how many had been ordered, he said he was not sure. Blue harnesses had been purchased and many had been ordered. He did not know the exact number. When asked if the purchase order had ever been cancelled, he said not to his knowledge. When asked if he had ever talked to Pat Jr. about the harnesses, he said yes, they had had conversations about them before. Asked to describe Pat Jr.'s approach to the use of the different harnesses, he said Pat Jr. thought the blue ones were better, but the yellow ones worked as well.

Mr. Fang was asked if there was a price difference between the two harnesses. He said he did not know the price difference off the top of his head. He said he was not sure if there was a price difference, but a price difference would not really impact the decision to order additional blue harnesses.

When asked if he was involved in the pilot meetings where harnesses were discussed, he said yes. He was invited to all the pilot meetings. He was not able to attend all of them, but if he was absent another ops person would be there.

When asked if there was an age limit for how young or old a person could be a passenger on a FlyNYON flight, he said as a general rule, anyone younger than 12 would not be able to fly on a doors-off flight, but regardless of that, if the child was 16 and too small to fit into harness properly, and the pilot decided not to fly that passenger, NYONair would not put that passenger on a doors off flight. Asked if that policy was written down, he said he thought that was in their terms and conditions. Asked if that was a waiver, he said no, it was something the passenger agreed to after checking out online when booking the flight. All their bookings were done online.

If someone came to them with a child under 12 years old, they would put them on a doors-on flight unless someone was really upset and serious about making things work, and then it would always be left to the pilot's discretion. Asked if there was someone at NYONair who screened for this type of thing to ensure everyone was over age 12, he believed it would be the front desk staff, which was staffed by NYONair CX's.

Asked if a CX ever came to him asking what to do with a child less than 12 he said yes, but the CX's knew what to do. They knew to let them know it was a doors-on flight. Many passengers called ahead with a small child, so expectations were set before arrival.

When asked to describe the policy if passengers arrived and appeared to be inebriated, he said if a passenger walked in and was visibly inebriated and not fit for the briefing, they would not fly. If a CX noticed a blatantly inebriated passenger, they could make that call and refuse them to fly, but it was always the pilot who had final decision on the ramp. The CX would also go to Mr.

Fang if there was a problem. When asked who he would go to, he said ops. Mr. Fang would probably say "I got it." If the CX was uncomfortable briefing someone because they were not compliant, that person would not fly. If it got to Mr. Fang, he would handle the situation delicately. It would not be raised above him. That passenger would just not move forward in the process.

When asked if they observed a compliant but intoxicated passenger who was not totally functional but still wanted to go, he said at the end of the day the pilot would have final discretion on the ramp. They would give the pilot a heads up to watch out for the person and tell them if they did not feel comfortable with that passenger on the flight to let NYONair know. When asked if NYONair trained its personnel on how to deal with an intoxicated passenger, he said no.

Asked if there was a test following the passenger briefings to ascertain the passengers' understanding of the information, he said no, there was no formal test. What was in the video was continuously reiterated, and if the CX saw that the person did not understand the briefing, they would know. When asked if the CX was trained to know if the passenger comprehended the briefing information, he said no, and he was not sure if the pilots were trained on that. When asked him who trained him, he said no one explicitly trained him.

When asked if he established the process and procedures for his own job, he said yes, and he was educated on the existing process, and then did not receive any training beyond that. He said he was evaluated on his job once a year by Pat Jr.

When asked if there was any written guidance for ops center personnel, he said no. NYONair ops center personnel were responsible for both 91 and 135 charter flights. When asked if there was any written guidance for NYONair ops personnel for their job as flight followers on 135 flights, he said nothing formal, no. If they had any questions, they could go to another ops person who had been there and understood the process. Their training was all OJT.

When asked why he was included in the plots meetings, he said he had a lot of departments reporting to him, and he was a good person to relay and disseminate information. His participation was not to provide any input but disseminate, unless unless the topic was one of customer service or the customer experience.

When asked what the ops control was, he said it was just a logistical liaison. At end of day, ops did not have the authority to cancel or launch any flights; that all went to the pilots. Their authority was to create a schedule for pilot approval and communicate to their CX team if there was a delay or something needed to be communicated.

When asked whether he knew the FAA definition of operational control, given that he had authority over ops personnel at NYONair, he said no. When asked who at NYONair had operational control over NYONair's 135 flights, he said Brian Rosenberg. When asked if he knew who at Liberty had operational control of their flights, he said Paul or Pat Sr.

Mr. Fang was asked to elaborate on a conflict between the Liberty pilots and the CXs involving old weather that had been discussed in his previous NTSB interview, he said that temperatures were starting to get cold in January 2018. They were doing doors off tours and pilots were remarking that the duration of the tours and the back to back flights were becoming difficult. Once the temperature had dropped consistently below a certain threshold, Pat Day Sr. had implemented a minimum temperature threshold that NYONair followed.

Asked if he recalled an occasion in January where a Liberty pilot had refused to fly because it was too cold, he said yes. Asked to elaborate on what happened, he said the pilot told them it was too cold and they then told all the passengers that the flight would have to be serviced with the doors on.

When asked about the process they used that day when flights had to be serviced doors on, he said they built a roster and sent it to Liberty to see what they could do. Liberty said they could not do any flights with doors off, but they could do flights with doors on. NYONair had received that and passed it on to customers. Mr. Fang relayed that information to Pat Jr. via a text message to give him a heads up.

When asked if he recalled sending a text to Pat Jr. that day telling him that Liberty pilots were taking the easy way out despite being in a “tough spot,” he said yes. They had already done a full day with the doors off in identical conditions. When asked what he meant by Liberty being in a “tough spot,” he said that to his knowledge Liberty was struggling from an economic standpoint. When asked the purpose of reiterating that to the NYONair CEO, he said he wanted to let him know the information as he saw it. When asked if Liberty’s financial struggles influenced decision making at NYONair for the scheduling of Liberty to cover FlyNYON flights, he said not to his knowledge.

When asked if the age restrictions outlined in the terms and conditions were guidelines or legal requirements, he said they were there as a fallback, and most of that language centered around their refund and cancellation policy. He said there were always “edge cases” where they would refund despite the passenger violating the terms and conditions, and that fallback was if the passenger became upset. When asked if it would then be up to the pilot’s discretion to fly the passenger if the passenger became very upset, he said yes, and in that case, the pilot had the authority to override NYONair terms and conditions. Asked whether Liberty pilots knew they had the authority to override the NYONair agreement with passengers, he said no, he did not think so.

When asked to clarify his earlier comment that one of his job tasks was related to “customer experience culture,” he said that meant they wanted every customer to have an incredible time and remember them for all the right reasons.

When asked what title Scott Fabia had at Liberty, he said he believed Scott was the director of safety. When asked why Scott was removed from the pilot meetings, he said “customer service friction.” There had been numerous reports of Scott saying things in a certain way that unnerved passengers and damaged the experience. When asked whose decision it was to remove the Liberty director of safety from flying FlyNYON flights, he said it was Pat Jr. When asked if

anyone brought Scott in for formal counseling to discuss his customer experiences with passengers, he said he did not believe there was formal counseling, but whenever there was an incident where he would demonstrate poor customer service, Liberty ops would be notified.

When asked how he would know if it was poor customer service or the Liberty director of safety questioning a safety issue, he said Scott could always question something, but it was the way things were said in front of the passengers, and the combative interactions with the CXs. He said that even though Scott was removed from the pilot meetings, he was always welcome to contribute to safety. When asked if that was before or after he was removed from the safety meetings, he said both.

When asked if he ever heard of any instances of potential conflict between tethers or other passenger items and the fuel controls on the floor of the B2 helicopters prior to accident, he said no. When asked if it was ever identified as a potential hazard, he was not sure, and had not heard of that, and he believed Christi would have a better answer.

When asked if there was there a formal or informal standard practice for securing the excess length of tether for the front passenger, he said yes, and he believed the rings would be looped around each other in a certain way, so they could be shortened, but he thought that would be a better question for Moe. When asked if that was a formal policy and whether it was written or briefed, he said he would have to refer to the CX training.

When asked if the loose-fitting passenger harnesses were considered a safety concern, he said if loose fitting on a passenger, yes. If so, they would change it so that would not be the case. When asked how the yellow harnesses were tightened to ensure tight fit, he said by straps pulled as tight as they could go, and if need be a carabiner could be installed on the back to be tightened, but if needed they would utilize a blue harness instead. Asked whether zip ties were used to tighten the yellow harnesses, he said on occasion they would use zip ties, but that was a while ago. He remembered at one point they stopped using them and began strictly using carabiners. Asked when that change had occurred, he said sometime toward the end of 2017.

Asked if he was aware that passenger seatbelts were occasionally unbuckled in flight, either intentionally or unintentionally, he said he had heard about a couple incidents, yes. Asked if that was considered a safety concern, he said yes. Asked what was done to mitigate that risk, he said additional training for the CXs, to make sure the belts were buckled without twists, and the SOP included additional checks for pilots to take one or two more final looks before lifting off.

Mr. Fang was read an email sent by Pat Jr. to Brent Duca, with a cc to Mr. Fang, that said "Let me be clear, this isn't a safety issue with the harnesses, the pilot may not query about the harness. If they have an issue as with all issues that aren't safety related they can take it to their Chief pilot who can address it with me." Asked whether he agreed with that sentiment, he said, "Yeah." He said he thought that at the time the Liberty pilots were pushing for not ever using the yellow harnesses, only the blue harnesses. The idea at NYONair was that although the blue harnesses were more robust and they planned to transition over to using them, the yellow harnesses they had been using for years were good enough, so for that reason both harnesses were to be used. Asked why NYONair did not just buy all blue harnesses, he said he was not

involved in the ordering process so he was not sure. He said it was possible the manufacturer only had a certain number in stock.

When asked if the more accessible tether attachment point on the blue harnesses in the small of the back was seen as a potential benefit from the standpoint of passenger egress in an emergency, he said he was not sure.

When asked what inspection and maintenance protocol was in place to ensure the supplemental restraint systems remained in acceptable condition, he said he was not sure.

Asked when he first learned that there might be difficulty using the existing cutters to cut the existing tethers, he said sometime toward the beginning of 2018. When asked what was the reason for not immediately addressing that when it was determined that the tethers were difficult to cut with the existing cutters, he said as soon as they heard that Scott and Paul had already begun to search for more suitable alternatives, and once they found it the order was in motion. Asked whether the new cutters and tethers had been ordered by the time of the accident, he said he was not sure.

Mr. Fang was asked why, if they had not yet been ordered, they had not been ordered for 2.5 weeks after Scott had proposed the change at a pilot meeting. He said he was not sure. He had received a call from Paul that Scott had figured out the proper equipment he wanted to order. An email thread was started between Mr. Fang, Jill, and Scott. They asked Paul for online links, and he gave them to Jill and from there Mr. Fang was not sure of the timeline.

Asked why NYONair was not leading the effort to improve the tether and cutter selection, he said Scott was the first who identified the problem and the first to say he was going to take the lead.

When asked what attention was giving to ensure that passengers received standardized instructions on how and what to cut to escape in case of emergency, he said that on the CX side they had a training checklist on harnesses and tethers, and when Christi trained pilots, that was a critical part of the briefing as well. Asked what instruction was given to passengers, he said he was not sure. He would have to refer to the CX manual.

Asked if there was consideration of the headset cords being zip-tied to harnesses might hinder egress in case of an emergency, he said not to his knowledge.

When asked why there was never a full evacuation test involving the supplemental restraint system, he said he was not sure. Asked whether there had been one, he said he did not know if one had been conducted. He believed some Liberty employees had run an egress test.

When asked if he had been concerned that passengers would be unable to get out quickly in an emergency, like a dynamic rollover, or fire or immersion, he said not so much. He thought the cutting of the tethers with the knife was decent enough, and he trusted the pilots were making those decisions and had that in mind.

When asked about the timeline on cold weather flight policy development, specifically when the issue was raised and when the new policy was implemented, he said he did not recall the exact timeline. He just knew that once the temperature was consistently below a threshold, the cold rules were established. If the temperature was below 30 degrees, there would be no doors off flights. If the temperature was below 35 degrees, they could do doors off flights up to 15 minutes in duration. If it was close, they would call Paul and allow pilot discretion.

Mr. Fang was reminded of a series of text messages between Pat Jr. and Brent Duca involving conflict over the decision to cancel a scheduled departure on January 10. He was asked whether he felt that that flight had been an edge case in terms of the outside temperature. He said he did not recall the temperature that day. He just knew that on that day they had done a full day of doors-off flights without any issues. Asked whether this dispute occurred before or after the minimum temperature threshold was established, he said it was before. When asked to clarify whether it was just over 30 degrees for the flight in question, and whether that would have indicated no 30-min flights under the cold weather policy, he said yes.

Asked if he had flown on a doors off flight in temperatures like that, he said yes. Asked what the wind chill at 80 knots was when the temperature was 30 degrees, he said, "Very cold." Asked how NYONair ensured passengers were adequately dressed for cold-weather flights, he said it was in the checkout flow. They had added a new flow that said "winter advisory" and clarified their cold-weather policy and reminded folks to dress very warmly. The night before booking they would send an email reminding people to dress appropriately. They would remind them again when they arrived, and NYONair had purchased gloves for passengers to buy in case they forgot to bring a pair.

Asked whether there was a minimum clothing requirement in cold temperatures, he said no. Asked if there were any safety concerns with respect to cold weather and loss of manual dexterity in pilots' hands, he said yes, and that was why the minimum temperature threshold rules were created. Prior to that it was a case by case decision. Asked about passengers' hands and any concerns about their possible loss of manual dexterity, he said he did not know if they would call that safety-related or experience-related. If the passengers did not dress appropriately, they would be cold. That was why they sent the warning and made gloves available. When asked if there was any concern that that might affect passengers' ability to get out of their restraints, he said he did not believe so, no.

Asked if he was aware of any discussions before or since the accident about the front-seat passenger on the accident flight appearing intoxicated, he said he was not aware of anything like that.

Mr. Fang was asked to describe the plan for the developing NYONair's safety program prior to the accident, if there was one. He said that prior to the accident that would have been up to Christi and Brian to come up with additional protocols. He said that had changed, and the plan going forward was for Brian, as the new DO, to take ownership of a lot of those programs.

When asked if it was the CX's responsibility to ensure that passengers understood the briefing, he said yes. The CX was responsible for ensuring that in briefing room, but the pilot had the final

call at the ramp. There were no formal checks to ensure the passengers understood the briefing. The CX made sure the passengers understood items throughout the process. There was no QA to ensure the CX's were doing that other than noticing a pattern of missed items.

When asked if the CX's were evaluated, he said yes, they had training checklists and have to go through an entire mock harnessing and briefing. That occurred in initial training and any time there was a change in the SOP. When asked if their job performance was evaluated that way, he said not formally, and there was no 6-month or yearly review of the CX.

When asked who was responsible for maintaining the NYON equipment, he said prior to the accident, it was not written anywhere, but that would fall on the CX manager who took inventory at end of each day. When asked who the CX would go to if he saw an issue with the equipment, he said they would bring to one of the pilots to take a look to confirm if the thing should be retired or not. He was not sure if they were trained on what to look for.

When asked why the blue harnesses were preferred, he said from what he heard, it just had a wider range of fit, was better for smaller and larger passengers, and it had an FAA approval which was nice for the pilots as well. When asked why that was nice for the pilots, he said he was not sure, and that would be a better question for the pilots.

When asked why when Scott identified the problem with cutter and tether and brought it forward, why did not NYONair take over that responsibility, he said because Scott said he would take ownership of finding a solution. When asked, at the end of the day, if it was NYON's equipment, he said correct.

When asked his opinion of the friction between Pat Day Jr. and Scott, and whether he felt it was because Scott brought forth these issues and whether the conflict contributed to those issues not being taken seriously, he said he did not think so. When asked if he was aware of the friction, he said he was not on that thread.

When asked why Scott was removed from FlyNYON flights, he said poor understanding of their customer experience culture. When asked if that was why his concerns were not taken seriously, he said they were taken seriously and that was completely separate from Scott's understanding of their customer experience culture.

When asked if the NYONair front desk staff had any training to monitor for intoxicated passengers, he said no formal training.

When asked if he was aware if Scott was a NYONair or Liberty employee, he said Liberty. He was not sure if Scott had ever been a NYONair employee.

When asked who Scott, as a Liberty employee, would go to if he had any issues, he said Paul. When asked who had operational control of the flights he was operating, he said Liberty did if it was a Liberty flight. Asked whether NYONair had operational control of the accident flight he said no.

When asked if he was familiar with what a GOM was or what OpSpecs were, he said no. When asked if he was familiar with the procedures for the pilot meetings and which pilots were invited, he said not too familiar, and Christi ran the pilot meetings.

When asked where he heard that the blue harnesses were nicer for the pilots, he said saying the pilots liked them would be a better way to say that.

When asked to clarify his response that the maintenance of the equipment had changed since the accident, he said yes. They had created a new flight department since the accident, and that department had taken over responsibility for maintaining the equipment. When asked what was new about their flight department, he said it was a new-look department with a new structure. Brian was stepping up as the new DO. They had a “bunch” of new pilots coming in for training for the summer flying, and they had made a lot of structural changes to make things more efficient.

When asked to clarify his response that he had heard that Liberty pilots had run an egress drill, he said he had just heard that, and he could not recall where he heard it. He said Christi would have been overseeing and running point on those items at the time of the accident.

When asked to expand on his response that NYONair was not leading the efforts to replace the knives and harnesses because Scott was first to identify the problem, he said Scott had said he would take ownership of finding a solution and before that Scott had contributed multiple safety recommendations to NYONair, so it was not the first time.

When asked how long NYONair had been flying “shoe selfie” flights before using Liberty, he said about four years. When asked if it was true that for the four years prior to Liberty providing lift for FlyNYON flights, NYONair had not identified any problems with the knife and tether system, he said, “Not the way Scott did, I supposed.”

When asked if to his knowledge a risk analysis was ever performed on the flights or the equipment, including the harnesses, tethers, knives, he said he was not sure. When asked who would have done a risk analysis at NYONair if one had been conducted, he said he believed it would have been Christi. Asked to describe the roles of Brian and Christi, he said Brian was the chief pilot and Christi was a lead pilot.

When asked if NYONair had a safety department, he said no, not a formal one. When asked who was the manager at NYONair responsible for overall system safety, he said “whoever is in charge of our pilots.” When asked to clarify that whoever was in charge of the pilots was in charge of managing overall safety, he said yes. When asked if the CX’s had input on safety matters, he said yes, through the structuring of the SOPs that were drafted by the Liberty pilots with input from Christi and every one of the NYONair pilots.

When asked if NYONair had a director of safety, he said no, not to his knowledge. When asked if NYONair had a safety manual for guidance by its employees, he said there was one being developed now. He said that although they did not yet have a director of safety, they planned to create the position once the safety manual was established.

He was asked if he had anything else to add, and he said no.

Interview concluded at 1025.

25.0 Interviewee: Mohamad Elmaksoud, NYONAir CX Manager

Representative: David Harrington

Date / Time: April 25, 2018 / 1100 EDT

Location: Doubletree Hotel, Newark, New Jersey

Present: Van McKenny, David Lawrence, Bill Bramble, Emily Gibson – NTSB; Paul Tramontana – Liberty Helicopters; Brian Rosenberg – NYON Air

End Time: 1330

During the interview Mr. Elmaksoud stated:

He was 28 years old.

He graduated from college in 2012. He was a substitute teacher two years before graduating. He majored in secondary education and history. After graduation, he worked 5 years as social studies teacher in his hometown. He stated FlyNYON was a summer job that he had heard about from his younger brother who had been working there for a year. He said he applied for the job, flew and ended up loving the job. He said it was probably the best job he had ever had. Mr. Elmaksoud said he tried to learn as much as he could. He stated his brother does a lot in the company and he was “under his wing.” He said there was an opening for a managerial position at FlyNYON and it was a tough decision to make, either go back to teaching for the 6th year or take a manager position with NYON. He decided to take the position with NYON. He began working as a Customer Experience representative in July 2017 and in September became a manager.

Mr. Elmaksoud stated he had no aviation experience. He was hired as a customer experience agent. He was told he would be the NYC terminal manager and would manage the terminal in Kearny, New Jersey and the CX (customer experience) group.

He said the duties for the terminal manager included opening and closing and to make sure the terminal was kept tidy. He said the duties also included overseeing customer experience in the terminal, ensure passengers were kept happy and comfortable. Everything through the preflight process to ensure things went as smooth and efficient as possible. He said most of the work was at the NYON air facility in Kearny. Kearny Point was the office building. He mentioned other collateral duties at NYON were washing the vans and to ensure everything was good to go for the day.

He was the weekday manager. He worked Monday through Friday and would work the weekend occasionally. He stated his brother was the weekend manager. If he (the brother) needed him for any reason he would be there. His hours depended on the flights. For instance, the day of the interview there was rain so there were no flights. Usually, the last flight was at sunset. The first flight was around 0900 to 1100.

He stated there was no written guidance for his position. They just moved into the new terminal in August and being the facility was fairly new, he stated he just followed in the footsteps of the previous managers. His brother Hussein, Jordan, and Aaron were other managers.

When asked as the CX manager, was he in charge of the training, he stated they had something called the “cert, get them through the process”. He stated as far as any formal training they had joint training with the pilots. They would go over SOP and the pilots would tell them how they wanted the CXs to support them. He said training was in the terminal and he would take ownership. He stated the training at the heliport was not in his position to say.

He stated the CX activities at the terminal he trained and there was a manual. He said the cert training process was conducted “in house” for the CX. He acted as passenger a passenger and the CX would check him in, get his IDs, have him sign a waiver, and get him in the fuselage. They would then give more of the “experience”. Offer coffee, water, the bathrooms, then they would begin the safety briefing process and harnessing.

He said it would take two weeks to fully train a CX. The topics that he mentioned above were the topics CXs were trained to be proficient in. He stated he trained them on how to put the harness on. It was hands on and he had them put the harness on him as a passenger. When asked if there was a difference on the two kinds of harnesses, he stated one had a buckle and one had a strap. He stated he didn’t feel there was much difference between them besides fitting. He stated he did not think the CXs had a preference in the two.

When asked about his authority level and what he could do without approval, he stated if there was a situation and he needed to tell a passenger he could not fly he stated he would raise the issue before he made the decision. He stated his main job was to make sure passengers were having a great time. He said to tell a passenger they cannot fly was total opposite of what he was trying to do. He said the thing he dealt with most often was passengers who arrived late and would not be able to see the safety briefing. He stated he would tell them they could not fly. He stated he was not going to compromise safety, so passengers could not fly and that was where his authority would come in to play. When asked if there was any other time he would tell a passenger they could not fly he said he could not think of anything.

Mr. Elmaksoud said he reported to Jenna Myer and Ethan Fang before the accident, but mostly to Ethan because he was in the terminal with him and Jenna was in the corporate office upstairs. He said Ethan was his “go-to” in operations as well as Nick Florence, although he was not an authority.

He said he had not heard of any conflict, confrontation or tension between pilots and CXs, no issues where they did not get along as he said they all worked toward the same thing. When asked if he knew of any conflict with Liberty pilots, he stated that even with Liberty, they all worked toward the same thing, and that was keeping passengers happy, before, during, and after their flights. He said, “we never went out for drinks together but got job done”.

When asked if there were any complaints from CXs about how they were treated by the pilots, he stated, in the heat of the moment there were some things, for example, saying things in front of passengers or sometimes raising their voices, but not a personal conflict, just an issue that came down to customer service at the end of the day. Mr. Elmaksoud said if things being said to passengers were going to make the passenger second guess their flight, it should not be done. He said there was nothing personal between the pilots and passengers and that in the heat of the moment, they were trying to get their job done. He stated the CX refer to what is called the “NYON 10”, a 10 out of 10 for experience. He stated that maybe the pilots had their own agenda but hoped when working with NYON they were trying to get that “NYON 10” as well.

When asked how the tensions would get resolved, he said it got to point where the pilots would put issues on back of flight sheet. He said it was nothing personal, but would come back to the terminal, and he would raise it to flight operations. He said they would have a meeting at end of day and go over how the day went. He said it was a positive experience throughout the entire day and that is why he left teaching to work for NYON. He stated the reviews were amazing and that was what they were trying to maintain.

When asked about the turnover rate at NYON, he said he only had to let go of 2 or 3 CXs since he came on in September. He stated if it was to get really slow, like during Q3 or Q4, there were a core group of CXs. He stated that as they got into the warmer summer weather, they hired 3 CXs last week and another this week. He stated they needed to get them “trained up” for the warmer season.

When asked if he had ever been given any direction as to when to use the yellow versus the blue harness, he stated he had never seen anything written, just if the passenger was smaller they were to use the blue harness. He stated there was never really an order, as far as he knew, the harnesses were never regulated on open door flights. He stated operators all over the world were doing open door flights without harnesses, so everyone at NYON believed the harness was going above and beyond what most operators do.

He stated there was no set policy on which harness or what the preferred harness would be, or which should be used first. He said there was no written policy. He said the pilots preferred the blue harnesses, so they had tried to accommodate those wishes. He said if there was one group going up they tried to use the blue harness, but if four groups, the blue harnesses would be used on the smallest passenger. He stated they tried to use the blue harnesses first, but they were not required, it just had a better fit. He said it was the CX discretion because they were the ones putting them on. He said the CXs put them on and there was a final safety check at the helicopter where they can be adjusted or switched. He said it was the final say at the terminal and not left solely to an entry level position such as the CX. He said there were multiple eyes on the gear, that there were double checks and triple checks.

Mr. Elmaksoud said he would be notified if there was an equipment changes at helicopter. He stated it would go to operations. He said for the most part, they would have extra equipment in the van that would be switched out if needed. He stated he could only recall one time a yellow harness was not fitting properly. He stated it was just loose fitting, so they had brought up a blue harness. He stated whether it made it into the aircraft was up to the pilot and if they were willing

to work with them to make it flight worthy. He said he would be notified by operations if there was a change, not by a CX. He stated for the most part, operations were in communication with him.

Mr. Elmaksoud said he does not have an office or a desk. He stated he was at the terminal. Either he would be at the front desk or walking around the terminal. He said he would float around.

He said he would call in every week to the pilot safety meetings. He said he was not on every one but for the most part he was the CX representative. He did not consider himself to be one of the primary invitees or contributors.

When asked if there was an age limit for the passengers, he stated for the doors off flight the age limit was 12-year-old, but you could have a 12-year-old that was 40 lbs. and an 8-year-old that was 80-100 lbs. He stated for the most part they were with their parents. He said they would not put a child under 12 on the edge of the aircraft where there was an open door. They would always be inside with their parent, or in the front with the doors on. He stated on doors-on flights, there was no age limit. He stated it depended on the individual. It was a case by case basis.

When asked if he ever had to tell a customer they could not fly with a child under 12, he stated, "no". He said if they were with their parent and sitting on the inside, not doing the same movements as the adults, it was not so much about their age as it was their weight. He said if their weight was not enough to fit into a harness correctly, they would not put them on the outside seat beside an open door. He stated they were with their parents and he was sure they would want them to be as safe as possible too. He said they would talk to the parents and suggest they be on the inside or in the front seat with the door on.

When asked if there was any written guidance about the age limits he said he believed there was something about needing to be 12 years old, but they always try to accommodate. He stated they do not want to bar anyone from going up and getting the experience.

Mr. Elmaksoud said he had no concerns about youngster under the age of 12 being able to egress in emergency with a knife. He said every harness has a knife and that would include someone under the age of 12.

Mr. Elmaksoud said there was no policy regarding intoxicated passengers, but they were always vigilant. He said they were already vigilant about what they were wearing, the appearance, what was in pockets, etc. He stated they were the first person they saw, that they were face to face having conversations and getting to know the passengers. Where they were from, had they ever flown before, and that they were very face to face when harnessing. He said they were very vigilant, that they were told to always be vigilant.

When asked what they would do if someone showed up intoxicated, he said he could not say whether they were or not. He would just look for signs, their breath or stumbling. He stated he had never had anything to the point where they were stumbling. He said he was not an authority and not trained to make a call if someone was intoxicated.

He stated had he smelled alcohol on someone's breathe, he would have brought out to operations. The CX would let the pilots know that they might want to evaluate them. Mr. Elmaksoud said first, operations would look at them, if they looked fine to them, he stated they would send them out and it would be the pilots discretion and the CX would let the pilot know discretely before the passenger contacted the pilot. He stated in operations, he would tell Ethan, Nick or Tyler, it depended on who was working that day. This would be for anything safety related, not just intoxicated passengers. He said it was always at the pilot's discretion. He stated that the CXs were just to get them ready to go out to the ramp and the pilots were to evaluate the final safety check.

When asked if they did any sobriety tests, he stated no. When asked if the operations person would go to the passenger and evaluate them, he stated no. They would not conduct any type of sobriety test, they were not police officers. He said they would let the pilot know because they may have had some kind of training that they were not given.

When asked if the CXs were given any training to handle intoxicated passengers or how to handle he stated not to evaluate, they were told to bring it up to him and when he had the information, he would go to operations. He said operations would say it was the pilot discretion. CX would not make calls about passengers being drunk or too drunk to fly. He stated it was too big a decision for an entry level position.

When asked if he had ever told a passenger he could not fly because of a possible intoxication, he stated no, that it would not come from a CX. It would be from the discretion of pilot. He stated that had never happened, that no passenger who came into NYON for a flight was never told they could not fly because they were intoxicated. He said he did not recall any CX saying that. He said he could not recall a pilot ever saying that either, but there was one time he remembered a pilot smelling it and it was brought up to a NYON pilot and they felt they were good to fly. He stated they were very responsive to the briefings and followed along with briefings. He said that was the only experience he had ever had with that.

He stated again he had no written guidance for his job as a terminal manager. He said the CX manager and trainer had guidance in the training manual. When asked what the manual told him you to do, he stated it was the entire experience, from check in. When asked when the SOP was included in the manual and when it was developed, he stated he did not have a date. He knew there was joint training with pilots and the pilots took ownership of that.

When asked if these were NYON pilots, he said all pilots who were flying NYON flights had to operate under the SOP and there was training with the CXs to ensure everyone was prepared. He said the CXs were certified and when asked how they were evaluated on an ongoing basis, he stated if the passengers are happy with them and he felt comfortable with them and if passengers were given top notch service they were doing their job. He said obviously if things were raised by the pilots on back of the flight sheet it would be discussed at end of day.

Mr. Elmaksoud stated they supported the pilot in any way they could. When asked if he assisted in the loading of the passengers he said if the pilots liked him to, the SOP stated that they would

help but it was whatever the pilot would want. He said they would typically help the pilot with seatbelts and headsets mostly. They would doublecheck each other's work, but the pilots would do the tethering and they would help with seatbelts. He stated they would go to the opposite side and to check the tethers and then they would come around and check the seatbelts.

He stated the CX did not tether. The pilots were very specific about how they wanted the tether to be. He stated he had helped to attach the carabiner at the pilot's request. He stated the entire loading process was the pilot's responsibility. The pilots had total control of the experience from the beginning and if they wanted support of the CX they could have it.

When asked if anyone monitored the three-minute safety video, he stated the CX monitored to make sure passengers were paying attention. He said the first thing they say in the briefing was to put phones and equipment out on the table. They told the passengers they would be watching a short 3-minute video and they would answer any question at the end.

When asked how he knows that the passengers would know the information that was shown in the 3-minute video and if there was a test, he stated no. When asked how they would evaluate if they have absorbed the information he stated teaching and something like this is very different. He said airline passengers are not tested on the safety video either, that they expect them to pay attention for their safety. He said he had never heard of any test at airlines. When asked if any airline fly with doors off and passenger feet hanging out, he stated that the news media and photographers aren't given a test and they fly with doors off. The CXs just monitor the passengers during viewing of the video.

Mr. Elmaksoud stated NYON had 30-40 yellow harnesses and 5 blue harnesses ready to go with cutters. He stated they had 10 blue harnesses that were waiting on cutters. He said at the time of the accident there were 15 blue harnesses, 10 of which were waiting for cutters, but he was not sure if they were waiting for the same cutter or if they were transitioning to a new cutter.

Mr. Elmaksoud said he could not speak to the communications happening between the pilots and upper management, or of any kind of issues that rose about the cutters or tethers. There would be a transition period. He stated they had 15 blue harnesses, but only 5 of those harnesses with cutters could be used. He stated they had 40 yellow harnesses and 5 usable blue harnesses.

Mr. Elmaksoud stated that since the accident they do not use the harnesses any longer. He stated an order for the harnesses had been cancelled and since the accident there had been a ban on the use of harnesses.

When asked who was in charge of the inventory, to make sure there was enough, in good working condition, he stated he would be that person. That the CXs were hands on. They put on and took off the harnesses and at the end of the day they would check them.

When asked if he had been trained on fraying or load capability, he stated he was not trained but if he saw any wear and tear on any of the equipment he would take them to the side. He stated he had never been shown anything. He had seen a manual for the harnesses and he had gone through the manual and stated it said if there was any wear and tear, that is what they should look for. He stated they were in the customer experience department and if passengers put on a worn

harness it looked bad. He stated they were not going to use any gear with wear and tear because that would affect their experience from an aesthetic standpoint and of course a safety issue, but from an aesthetic standpoint it does not look up to par.

When asked to clarify if he or anyone else had been trained on the recognition of harnesses and the wear and tear, he stated he had read the manual but had never been trained on it. He said if he had saw webbing and stitching that looked to be worn it was not going to be in circulation and if he thought it was an issue he would bring to the attention of operations. If he was to bring to operation it was because it did not look right.

Mr. Elmaksoud stated the harnesses were never regulated and that NYON went above and beyond what most operators do by having the harnesses. When asked if they ever conducted a risk analysis on the harnesses he stated no but felt safer in a harness than a seatbelt with an open door. He stated he did not feel as comfortable with solely a seatbelt on during an open-door flight. He said a seatbelt was the only thing keeping him from falling out of helicopter.

When asked if he was aware of any risk analysis that NYON did with CXs to ensure passengers could get out of a harness tether system in a timely fashion he stated that in his time he did not recall. He stated he joined NYON in July of 2017 and became a manager in September of 2017. He said NYON had been around since 2012 and FlyNYON since 2014.

When asked as the manager in charge of the CX group, had he ever questioned if passengers could get out in timely fashion, he stated no, that he felt extremely safe when he flew. He stated the CXs were vigilant. He said the safety video showed everything one would need to know to come out of the harness and tether. He said that was all he needed, and he was not going to test anybody.

He said the reason he had to let 2 of the CXs go was because he did not feel they were needed for the upcoming season. It was a slow season and they were not the right fit for the core group and he wanted to give priority hours to the CXs who deserved it.

When asked what the NYON 10 meant he said for us to google FlyNYON. When asked again what it was he stated it was to make sure they received a 10 out of 10 rating. He said that is what they strive for. He stated Pat Day had great leadership, a great vision. He said the impact he had on the passengers from all over the world was amazing. He said the passion he worked with was very contagious.

When asked if any of the “NYON 10” rating system had anything that dealt with safety, he said he did not know how the CX could affect safety. He stated the CX could answer questions and concerns, and they would make passengers comfortable and safe. He stated at the end of the day they are hoping pilot give the 10 with safety and experience. Smiles.

When asked if safety was considered in the 10, he stated they are going to give a 10 out of 10 customer service. He said the pilots are the professionals and he would imagine they were giving the “NYON 10” with safety and flight worthiness.

Mr. Elmaksoud said the role CXs play in safety at NYON air was the safety briefing, to make sure passengers paid attention to safety briefing. He stated the CX was the first set of eyes. They were not the be all end all. He said he would never want an entry level position to be that, but they were in the first set of eyes. He said they made sure passengers paid attention to the video, that no loose items would come out of the aircraft, made sure sneakers and shoes were tied, and hair was tied up. He stated again they were the first set of eyes. He said a final safety check was when they take them out to the ramp and the pilot receives the group and flight sheet.

When asked what the guidance or policy was regarding children who flew these types of flights, he stated there was no hard and fast rule. It had more to do with weight than it did with age, being 12 years old.

Mr. Elmaksoud stated there was no guidance on intoxicated passengers or passengers that had been drinking. He said had it been brought up he would have had to let someone know. He stated who were they to say if passengers had been drinking. He said they are not experts. In “that” and not experts in aviation. He said he remembered one-time he smelled alcohol on a passenger. He said he did not think he was intoxicated. When asked how he knew he was not intoxicated, he stated the passenger was not stumbling. The passenger was polite and respectful. He stated he had no clinical background, just street knowledge, knowledge gained over time. When asked if that pilot flew the passenger, he stated they did.

Mr. Elmaksoud was asked if he had worked with Scott Fabia and Brent Duca on one of their flights. He had never worked for Scott, but he said he had assisted him. When asked to describe Scott he said he was hot and cold, there was not just one Scott Fabia. He said he had amazing interactions with him, including a conversation at a holiday party. He said he had a bipolar personality to begin with and some days he was great, and some days he was unpleasant, especially in front of passengers. When asked to clarify if he was bipolar, Mr. Elmaksoud stated he was not a doctor, but he was hot and cold and sometimes he was a “NYON 10” and sometimes a 0.

He stated that whatever issues a CX had with someone they would write on the back of the flight sheet, with that has to do with the flight or professionalism. The issue would come to him and to operations. He stated they never said anything in front of passengers. He said if the passenger were about to fly on a flight, there were other ways one should have gone about things.

He stated he had not much experience with Brent Duca. He was much more respectful and polite, especially around passengers. He was much more professional than Scott Fabia. He said he was respectful and polite when he would bring things up. He said he had nothing bad to say about Brent Duca in his experience.

When asked if he had ever seen the FAA come out and do ant observation work he stated the FAA came out on October 31, 2017. He said he went through the entire process and as far as he knew everything was great with that meeting. He stated obviously this was a tragic accident that happened and in hindsight he did not know how something like this could happen. He said without an aviation background, he considered FAA to be a federal department and if they had checked the entire process and had nothing to say, he thought the company and culture, and

everything was the best operation and safe. He stated he felt the FAA reaffirmed that for him because they were the aviation experts.

When asked who at the FAA he had interacted with he said “Paul”. He stated he did not hear the FAA say those things. He said Paul told him they had said those things. When asked if he had seen the FAA since the accident, he said no, he said he did not know, he did not have direct interaction with the FAA. He said he believe he saw the NTSB or FAA at some point. He said he did not know if the FAA had observed any training of operations or the CX personnel.

When asked if he had ever heard of any instances of potential conflict between tethers or other passenger items and the fuel controls on the floor of the B2 helicopters before the accident, he stated “never”. When asked if this was ever identified as a potential hazard, he stated no and when he heard about the possibility of it in this accident he wondered how it could even reach. He stated if the pilot clipped the tether on tight enough, the tether should be very tight, not loose so it would not get in the way of anything. He said he could not visualize it to this day.

He stated he was not aware of any formal or informal practice for securing the excess length of tether for the front passenger. When asked if loose-fitting harnesses were a safety concern, he stated for the pilots it was but he did not know what the concern was because they were told that harnesses were not regulated and that you do not have to fly these flights with the harnesses. He said the way the harnesses fit was just like opinion if they were too tight or loose. He said there was no regulation, it was all just opinion, they defer to the experts.

He stated the pilots concern about the harnesses were the fitting. They were concerned about what would happen if the harness did not fit right, people falling out.

When asked if he saw the potential as a hazard, he stated no because there was never a close call or anything. He said that was basically it, he never thought a passenger would fall out of a harness. He said if that was the case they would not be on the open-door side of a helicopter. He said he understood it was a concern, but he thought it was a little exaggerated. He stated obviously he did understand the concerns and they worked to improve all of it by tightening the harnesses and transitioning to the blue harnesses. He stated they wanted to improve. He did not think it was safer with the blue harness or a tighter harness.

Mr. Elmaksoud said he was aware that passenger seatbelts were occasionally unbuckled in flight, either intentionally or unintentionally. He said he thought it occurred maybe twice.

When read the statement from Pat Day Jr. – “Let me be clear, this isn’t a safety issue with the harnesses, the pilot may not query about the harness. If they have an issue as with all issues that are not safety related they can take it to their Chief Pilot who can address it with me.” – he stated he agreed with that sentiment because there was no regulation on harnesses and because of that then what would be the safety concern. He said it was hard to really understand as there was no context to the pilot concerns. He said maybe if there was a test or an analysis for harnesses, then maybe he would be able to understand, but he definitely agreed with Pat’s statement. He said they had been using the yellow harnesses and they had worked perfectly fine. He said if the pilot worried about which harness and the fit, they had weekly pilot meeting and would try to come to

a compromise. He said he definitely agreed with Pat. He said his family had over 100 years aviation experience. He definitely trusted his experience in the field.

When asked if he ever viewed the more accessible tether attachment point on the blue harnesses in small of the back as a potential benefit from the standpoint of passenger egress in an emergency, he stated yes, but when sitting down, that ring is right by the hard point of helicopter, so even with yellow harness there was a locking carabiner there. He said there was one at the top of the back for yellow, but if you turn around, the locking carabiner was right on the hard point on the helicopter. It was in the exact location as the ring on the blue harness, so it is inches apart. He said that was true for all four people in the back. He said the tethers were routed across helicopter from the passenger to the opposite side hard point, but there were hard points behind each passenger. They might not be able to get themselves out but if every single person reached back and unlocked it, it would still have the same (affect). He said you could grab another passengers tether and cut it because its connected right behind them, not your own tether. He said you could just look behind and cut a tether and if it were him, he would just cut the first tether he saw.

When asked if you could physically get to the tethers if you had four abreast, he stated yes, because the passengers had movement and they were not extremely tight. He said there was definitely some space to move, to angle yourself, unlock carabiner or cut the tether itself.

When asked how he knew that, he stated he had never been in an accident, but there is a visual in the safety briefing. He said he knew the knives were very sharp, but if you cut it once it would get dull. He said he did know but he was trusting what he saw in the safety briefing video.

When asked what inspection and maintenance protocol was in place to ensure the supplemental restraint systems remained in acceptable condition, he stated there was no official inspection, but they were in front of equipment checking at the end of every day. He stated there was an end of day checklist that he, for the most part did, at end of every day, sometimes it was a CX. They checked the harnesses, phone clamps, goggles, things like that.

He said he could not comment on the timeline that identified the problem with existing tethers and cutters and new ones to purchase. He said he was the CX manager and did not make decisions on purchasing what harness they were used.

Mr. Elmaksoud said he did not know about a problem with existing cutters to cut existing lanyards. He said nothing had been experimented or analyzed professionally. He said he thought it was just preference that the pilots preferred. He said he did not know if it was a real problem or issue, but he did remember pilot meetings and from the lead pilot they were looking into new tethers, cutters, and harnesses. He said you could say it was a bit of a transition period, but he did not know all the details.

When asked what the instruction was given to passengers on where to cut with the cutter, he stated it was in the safety briefing video. He said they would point the cutters out, not instruct on how to cut. He said the CX was just an entry level position. He said the safety briefing showed it

on the video. He said the pilot would ask where your cutter was and explain what it was for and that was basically it.

When asked was there consideration of headset cords zip tied to harnesses hindering egress in case of an emergency, he stated that they did not zip tie any headsets to harnesses. He said they were non-locking carabiners that a wire would slip through, so the headset did not depart aircraft. He said it was a push-in kind of lever carabiner. He said he did think that the method was always used and that when Liberty Pilots started working with NYON they started putting zip ties on the wires to clip that to the carabiner. They attached the zip tie. He said whenever they brought up safety issues they tried to improve.

When asked if he knew if there was ever a full evacuation test involving the supplemental restraint system, he stated in his time he did not know. He said he did not know if they tried it out when they first created it. He did not recall any of that in his time.

When asked how the CXs ensured that passengers were adequately dressed for cold weather flights, he stated there was a winter weather advisory on the website, but they also sent a confirmation email. He said it was different color and bold and told them to prepare for their flight. He said he compared it to skiing and snowboarding, he said you know what you are getting in to, winter in NYC is going to be cold, like skiing so prepare yourself.

He said they had gloves and sweaters that passengers could use if they felt they needed it. He said they would highly recommend but could not force someone to go up with just a sweater for example. He said there were items they would recommended, but had no requirements, other than no loose-fitting shoes. If a passenger had heels on, they would secure them.

When asked if he was aware of any discussions since the accident about the front seat passenger on the accident flight appearing to be intoxicated, he stated no. When asked if he spoke to the CX about the accident flight and how it went, he said his brother was the manager that day and never once did anything come up about intoxicated passenger that day. He said as far he knew, his brother had no conversation about any intoxicated passenger.

When asked who the CX was working the accident flight he stated he did not know off the top of his head but the CXs who worked that day was his brother Huus, Kiara, and Kelly.

He stated he did not know if it was any one person's responsibility for maintaining NYON's safety equipment. He said basically they make sure they are ready to for the next day. He said there was nothing official written down, if there were any issues they would put it to the side.

He said he was responsible for ensuring the CXs did their job correctly the way they were trained. He said he evaluated them through the certification and that he was floating and overlooking every aspect of the preflight process. He said he would listen to conversations with passengers, be in the safety briefing room with them, and helped with securing equipment. He said on the ramp, it was the pilots who were overseeing what the CX were doing. He said at the end of day, they talk and have an end of day briefing on what they can do to improve. He said it was mostly positives, but there were some things that needed to be tightened up.

When asked who was responsible for physically putting the passengers in the helicopter, he stated it was the pilots and they were only there for support. He said the pilots put people in each seat. Once they get to the fence and hand over the flight sheet to the pilot, the CX is purely there for support, whatever the pilot would need. When asked if they just stand there and wait for guidance from the pilot he stated they could if it was what the pilot wanted. If pilot wanted help putting them in the helicopter they would do that. He stated it depended. It was a pilot thing. He stated at the end of the day a CX was an entry level position and they were there to support the experts, the pilots.

When asked to clarify what the SOPs stated that the CX did have responsibilities in the loading, he stated with seatbelts and headsets only. He said they offer to help but sometimes the pilots would tell the CX to stand back or they could do more. He said they defer to the pilots when they are out there.

When asked if the procedures were not always standard, he said it depended on the pilot. He said they are trained on the SOPs, but it depended on the pilot. When asked if it was ever brought to his attention as the CX as manager, that SOPs aren't always adhered to. He stated no because he knew they always deferred to the pilot. He said the CXs were in no way an expert. He said he deferred to them on the harnesses and tethering as well.

He did not know exactly what the safety video said about quick egress but said there was a visual about taking out the cutter and cutting the tether. He said they did not show a make-believe accident but there was a visual in the video. He said there was also one about the carabiner, locking into a hard point. He stated they had a new safety video, but he believed it was there. He said it's a new video because they were doing doors off with seatbelts only.

When asked if the CXs were the first set of eyes, did that mean the CXs are staffed behind the front desk, he said yes, it could be a CX or himself. That they are the ones in the terminal, they were the first set of eyes when it comes to passengers.

When asked if the CX had been given any training or told what to look for certain things like a passenger who may have been drinking, he stated not what to look for but they were very face to face and hands on and if they felt like someone had been drinking or smoking, it was something they would bring it up to management, and they would evaluate whether they are really intoxicated, not able to answer questions, being erratic, disrespectful. He stated at the end of the day it was the discretion of pilot. When asked if there was a process to elevate he stated yes.

When asked if there was any thought given to the harnesses and how it might affect people getting out of the aircraft, he stated yes of course, but there were so many other issues like the flotation devices that did not blow up properly. He stated if they had worked the helicopter would never have been underwater. When asked besides this accident, was it ever a concern in general, he stated no, because if on solid ground or on flotation devices, he did not see how it would be difficult to get out. He said they should have known from the safety video, they should have known where the cutters were, where the locking carabiners were. He said to think they had harnesses on, so they would not be able to get out was never on my radar. When asked how he

knew that the passengers know where those items were, he said he did not, there was no test, but just like the airlines they do not test. He said they reiterate the items at the heliport, he said it was another set of eyes. He said in his opinion it was an amazing process. He said the incident was an unfortunate incident, but he thought it was an amazing process.

He said he did not know if the blue harnesses were safer. He did not know if there was research. He said it was a preference of the pilots. He said he thought the company was looking to improve. He stated the fact they were even using harnesses to begin with was going above and beyond. He mentioned that they had won the northeast region safety award in 2017 and there was nothing alluding to unsafe operations. He said the FAA had no concerns and they have conducted over 35,000 flights. He said there was nothing that indicated anything other than a safe operation.

When asked what the age limit for doors off operations were, he stated he did not know of a real limit. He said age 12 was more of a guideline. He said they have had a 14-year-old that could not fly because of weight but they have had a 9-year-old on inside.

When asked if it was a guideline by weight or the know-how to egress, he said he did not know how to answer that, it was just a guideline. It was an eye test, a case by case basis. He said it could be age, weight, the parents, a little bit of everything. He said there was no standard because if you make it standard, and you have a 12-year-old who does not fit the harness it is not good.

When asked if the incidents he spoke about with the passengers who he smelled alcohol on, had that ever happened with a Liberty pilot on whether to fly him or not, he answered he did not recall that ever happening with a Liberty pilot. And when asked if a CX had ever told him that he stated no, it was rare, and he had only one experience. He said he would have heard it as the manager from other CXs, that experience was with a NYON pilot.

He was asked if there was anything that we did not ask that we ought to know and he stated the one thing that boggles his mind is how there is so much attention on harnesses whereas no questions surrounding floats, fuel switch on floor of helicopter unlike NYONs and how they could have purchased a plastic case. He said these things that impacted the accident, but so much emphasis on the harnesses, whereas if those pontoons floats would have worked we would not have had this discussion, he questioned if they were in a NYON helicopter would we have had this discussion.

26.0 Interviewee: Timothy Orr, Former NYONAir Chief Operating Officer (COO)

Representative: James D. Gatta, Goodwin Procter LLP

Date / Time: June 5, 2018 / 1300 EDT

Location: Via telephone

Present: David Lawrence, Van McKenny, Bill Bramble– NTSB

During the interview, Mr. Orr stated the following:

His name was Timothy Decker Orr, and he was 50 years old. He held the position of board member at NYONAir. He was previously the company's COO. He resigned from the COO position in April 2018.

When asked why he resigned the position of COO at NYONAir, he said that he had not really acted in the COO role for some time. He had held the title mainly because NYONAir needed to have someone with that title role, but they were actively looking for someone to replace him. There were plenty of other people conducting the activities of the COO. He had not been involved in the day to day activities of the company since 2016. Replacing him as COO was something they had long been considering, but they had been unable to find the right person. He felt it was time to step down officially after the accident occurred.

He held a commercial helicopter pilot certificate with instrument rating, and had about 2,000 flight hours, all in helicopters. Prior to working with NYONAir he had acted as a Part 135 captain for various companies that were managing the helicopter work that he did. He had flown his own helicopter under the management of other companies, and he had owned a Part 135 certificate starting in 1995. He had been working out of the New York – Long Island area since 1995. He turned that Part 135 certificate in around 2000 when he moved from Long Island to New Jersey.

When asked when he was first employed by NYONAir, he said that he partnered with Patrick Kevin Day in 2013. They created the company together. Mr. Orr was initially an investor, an angel investor, but not a majority owner.

When asked to describe the vision of the company initially, he said that their intent was to repopulate stock footage of New York. Had access to helicopters and the skies above the city. He thought that with that access they could capture a lot of photos amongst themselves and repopulate the business with more current and up to date photography. That was the vision was at the time. They would sell those pictures and post them on social media to build brand awareness. That was the original intent of New York On Air. The company was originally called New York On Air.

When asked to describe his original positions at NYONAir, he said that when he came on as an investor, Mr. Day asked him to become COO. Mr. Orr told Mr. Day he did not want to be in a management position, but Mr. Day asked him to hold the title to give the company more credibility. Having Mr. Day's name and Mr. Orr's name together gave the company more clout. The only real title Mr. Orr held was COO. That was about it.

When asked to confirm that he held the title of COO but did not actually function as the COO, he said, "not really." In the beginning, they were a very small organization, they were collaborative, and they were all pitching in and making decisions. As the company grew, Mr. Orr stepped away from being a "day to day guy." The only other position he had held at NYONAir was his position as a member of the company's board.

When asked who he reported to at NYONAir, he said the company's original employees were "all in the same spot together" and no one was really reporting to anyone, but Patrick Kevin Day

would have been his official boss. Asked who reported to him, he said that when he was with the company they were all in the same room together. It was collaborative. If anyone was reporting to him, it was maybe a pilot or some of the marketing folks or a photographer or something like that. It was pretty small at the time. He estimated that they had 10-15 people. They had access to his Twinstar helicopter and one or two others. His helicopter was under management. The other Twinstar they were operating was not owned by NYONAir. He was not sure if it was leased. How they had access to it was not part of his purview.

Mr. Orr was told that the NYONAir organization chart listed him alongside Charlie Komar and Vin Ferrell as members of the board. When asked to describe the backgrounds of Mr. Komar and Mr. Ferrell, he said Mr. Komar came on late 2017, mainly as investor. He had a helicopter that was being managed by Liberty and he knew aviation somewhat and helicopters a little bit. He had had a relationship with Patrick Kevin Day and Patrick Michael Day for quite some time. Mr. Ferrell might have come on board with the company in 2015. His background was non-aviation. It was more related to marketing, strategy, social media, and brand.

When asked what the roles of the three board members were, he said to provide guidance in brand awareness, and not so much strategic. Pat Day was really driving the bus as far as direction of the company. It was not an advisory board, they had voting rights, but more or less it was kind of an advisory board. Asked what kind of issues were discussed as a board, he stated they talked finances, typical what is happening, where they were going, what the strategy was. Where the brand is going, new hires, stuff like that. They did not discuss a lot of operations.

When asked to expand on his responsibilities and activities as COO, what he did, when did he stop doing them, and who took them over, he said that he did NYON flights, took photographers up, and he went up as well because he was a photographer. He was an investor and he was not paid as an employee. He was part of the beginning of the FlyNYON experience flights. When those flights started, he was there for that. He sat in on meetings, provided a little strategy here and there. It was very kind of loose. Officially as COO, he was not sure exactly what COO's did, but he certainly was not deep in the operations or made executive decisions on who to hire or let go, or the direction the company was going. When asked who was making those decisions he said that it was probably Pat Day and Jillian regarding more of the small day-to-day operations decisions. Jillian was Pat Day's right-hand assistant at the time, and she wore a lot of hats. They had a marketing manager, and people that were more dedicated to the photography piece. Operationally, responsibility would be Pat Day. He said that even though he was the COO on paper, Pat Day was the one functioning as the COO.

When asked if there was written guidance for fulfilling those COO responsibilities, he said that they did have an employment contract early on but once the brand pivoted toward experience flights, everything went a different direction. He was not sure the employment agreement stated specific roles or duties for the COO, and he had not looked at it since 2013.

When asked as COO if he had an office at the NYONAir Kearny headquarters, he said no. He was asked why not, and he said because he was not there enough to warrant having an office. He would sit at conference table if he needed to be there or he went into production office where most of his activities were centered around. The production office was in the hangar before they

moved to the Kearny location. They had a couple of temporary pods in there and a small office that they had all their camera equipment and computers. Pilots and cinematographers would congregate there.

When asked how much time spend at NYONAir office, he said early on he was there a few days a week or when he was flying. As the business grew, it outgrew him and his need to be there. Other people were taking on active roles in the company, and he would show up less and less. Over the last 16-18-20 months, he was there once or twice every two weeks, or once a week for a meeting if necessary.

When asked when he stopped flying for NYONAir, and he said he stopped doing NYONAir flights in the summer of 2016. He continued to do production flights, which was his bread and butter, and where he wanted to focus his time on more film work using gimbals and taking professional photographers up to do their own building shoots. This was production work for NYONair operated under the name Hangar 95. He thought Hangar 95 was formed sometime in late 2016.

When asked how often he interacted with the FlyNYON staff, and he said that in the beginning it was small staff and they were in the office all together. He interacted regularly with FlyNYON staff at that time. The FlyNYON flights with the doors off occurred further down the road. Once they moved out of the hangar he was far removed from day to day interaction with those folks. He guessed they moved out of the hanger in the Fall or Winter of 2016.

When asked if he held similar management positions at any other companies, he stated that he had his own LLCs that he managed, and only the small companies he owned himself.

When asked what high-level manager or executive was principally responsible for safety at NYONAir, he said that at the time it was probably Christi Brown. She came on and was running the whole flight department. Pat Day was probably involved but not so much day to day. Paul Tramontana came on in 2017 as a safety consultant. There was no formal safety officer at NYONAir. Safety was kind of a collaborative activity. Paul Tramontana started helping them in the summer of 2017. Otherwise there was no real safety organization within NYONAir. There was no one with the official title or anything of that sort. They had a lot of seasoned pilots and aviation professionals that knew a lot about safety and it was kind of a group effort. The COO's role in safety management was nonexistent, he provided his input, but it was not part of the purview of the COO as far as he knew.

When asked from organizational perspective would he expect the COO to be part of the safety management team, and he said that it was hard to say, maybe, but he did not know. When asked if it concerned him at all that he was not involved in safety management, he said that he did not want to be misread and that he was involved because he provided input on a big scale and they were all aware as pilots of what was safe and not safe. It was not unsafe environment. They were very conscious of safety. They developed the harness systems. It was not an unsafe environment at all. They were constantly trying to figure out how to improve and make sure every flight was entirely safe. That was inherently part of being a pilot and how they were trained, incorporated into his thinking, how he conducted himself, and how everyone in the company did.

When asked if he had any interaction with the FAA, and he said he personally did not. He said that he knew FAA did visit in late 2017 to assess how the harnessing system and how they were conducting flights. Christi Brown and Paul Tramontana were the FlyNYON liaisons with the FAA. If there was any FAA involvement before that, it would have been Christi.

He said that Pat Day was the visionary for NYONAir. Initially they came together with similar ideas, but Pat Day was the brainchild behind all their growth and direction for the company, especially as they moved away from stock photography as part of the business plan to more of the FlyNYON experience business plan. He said that was Pat Day's bread and butter with his background in sightseeing. Pat Day was instrumental in getting them to where they were. He would talk with Pat Day on the phone certainly once a week. Back in 2016 when he was still heavily a part of the operation, they would see each other whenever he was there, and they spent a lot of time together.

When asked to explain when they started to discuss finding someone else for COO position and who did they discuss it with, he replied that he definitely would have talked with Pat Day about it. He had talked about it from the beginning that he did not want to be in the role, but as a small business they could not afford anyone of that nature and they had to make do with what they had. He said he brought it up every year or two with Pat Day, and Pat Day would say that they were not there yet, it was something that was being floated about, and they were waiting for the right time.

When asked if he had any interaction with Pat M. Day (Pat Day's father and Director of Operations for Liberty Helicopters), and he said he had known him quite some time, but as far as relating to NYONAir, he did not have any relationship with him. Pat M. Day was not a part of NYONAir management until late 2017 when they acquired their Part 135 certificate. After that, Pat M. Day stepped in as the Director of Operations to satisfy the regulations until they could find someone to relieve him of that duty. He did not have any interaction with Pat M. Day while he was the DO at NYONAir.

When asked the history of the FlyNYON shoe-selfie photo flights and how it had evolved, he said that they started to develop the doors-open flights when they were sticking their feet out the door of the helicopter to give scale against the city in the photograph, and it had made it more exciting. That was how it started. Pat Day did the first official shoe-selfie himself over downtown New York. Once they posted those pictures on social media, it became a little bit of a phenomenon and something their customers wanted to do. It became popular as a brand. He was not sure if they coined the term "shoe-selfie," but it was something that they marketed. It was very popular, and everybody wanted to do it. The first shoe-selfie was probably posted on Instagram, but he had no idea when. As they were building their brand and they were using Instagram as a vehicle to market pictures like that, they received very positive responses. As they developed the passenger flights, it was something people had seen or done, and people wanted to do here. It was an opportunity for them to latch onto as a business; to market a shoe-selfie over New York.

When asked if at the time of the accident if he had any knowledge of any other helicopter operator offering similar doors-open aerial photography flights using supplemental passenger restraints systems similar to FlyNYON, he said that honestly, he did not know if other operators were using harness systems or not. He knew that there were a lot of businesses doing open-door flights, but he had no idea how they were securing their passengers and whether it was harnesses or not. He did not know if other operators used them. The tether and harness system was something they developed that was in the best interest of their customers to keep them safely in the aircraft and keep their gear secure.

Mr. Orr was informed that according to Pat Day's interview with the NTSB, that Mr. Orr and Rob Marshall developed the supplemental restraint system used on FlyNYON and Liberty flights, and when asked to describe how they came up with the idea for the harness and tether system, he said that it was very early on, and Rob Marshall was the production pilot and he did a lot of the NYON flights. Rob had a background in production and stunt work, and Rob felt they needed something other than just the seatbelts to keep the passengers in the helicopter during open-door flights. Rob came up with harness and tether system and was the lead on it. Rob would bring ideas to him and ask him to review what he was presenting. It was not fully collaborative, but "Rob took the lead and developed it from the get-go." Mr. Orr was involved in helping Rob come up with ideas, such as how they were going to secure the person, just as a secondary opinion, and Rob bounced a lot of ideas off of him.

When asked how the harness and tether system had evolved from the system he and Rob developed to the one used in last few flights this last spring, he said he was not sure. What they had developed was early on was kind of similar to what was being used. There had been changes to it, like where the tethers would attach, and changes to the harnesses, but the basic principal was the same. A lot of other people were involved after the initial development and after Rob left (the company). Mr. Orr had stepped away and did not know who might have made changes to where the tethers attached and how equipment might be secured to the harnesses.

When asked if the equipment was the same as what he initially used, he said the harnesses were the same for a while, and then they were in the process of acquiring FAA-approved harnesses. The tethers may have been changed at some point to a different style, as with the carabiner, but in the at the end of the day it was basically the same setup. When asked about the carabiners, he said he thought they started off with non-locking carabiners, and at some point, they changed to a locking carabiner as SOP (standard operating procedure).

When asked what experience he had with these types of harness systems, he said "other than when we started developing them, really none." He flew many times as a photographer wearing one, and felt very secure with them, but before that he did not have any experience with the harnesses.

When asked when he flew, how many passengers would be onboard, he said it would vary from a full load to just him, depending on the day. On production flights, it would depend on mission, but usually there was not a lot of people on board since it was a very specific mission, with one guy shooting the subject matter, or having a gimbal on the outside with no people harnessed inside. When he flew FlyNYON flights as part of the regular business, they would have a full

load up to 4 passengers, but he only operated the Twinstar and nothing else. Those were FlyNYON shoe-selfie flights. As they developed the brand, they would do it as a full-on NYON experience flight.

When asked if any of the supplemental restraint system had been tested, he said sure, through practice in the hangar to see how it felt to hang out, the tension, and what the egress was. He said that was more or less the extent of the testing. He said there was a good amount of testing. When asked if they tried to do fully loaded evacuation test with passengers tethered, he said he was never a part of anything of that nature and that size, but that was not to say it did not happen when he was there as it was being developed. When asked to clarify that the testing of the system involved practicing and installing the system, he said correct, and included how to move around the aircraft, how tight it should be, and how short it should be for someone leaning out of the aircraft; that type of testing. When asked why no egress testing was done, he said he thought they did some of that, but was not sure if it was with a full load of passengers. He was not a part of that testing, but it could have happened. He said that other individuals were involved, Christi had then come onboard, and “she and Rob really took the bull by the horns.”

When asked if they referred to any industry standards when developing the supplemental restraint systems, he said they were not aware of any. People had been using harnesses long before they started flying with them, but he was not sure if there was any official standard to follow with regards to the harnesses. When asked if any other industry experts other than him and Rob Marshall were consulted about the development of the restraint system, he said he thought they looked for different harnesses, and had looked at what Search and Rescue operations were using, but that was mainly an environment of being outside and not inside the aircraft, so much and what was available was not helpful, so they developed our own. When asked to clarify if they had consulted with any outside experts regarding the supplemental restraint system, he said they had not.

When asked if the FAA was consulted about the use of this supplemental restraint system, he said not that he knew of. He said Christi and Rob both had quite a bit of experience. Rob was a stunt pilot in Hollywood, and Christi was an experienced parachutist, so they felt the knowledge in the room was quite adequate. When asked if anyone ever brought up a need to consult FAA and see what they thought of this system, he said it may have come up in conversation, but he did not think there was any formal request to have them look at it until late October 2017. That was when the FAA came out and did a check of their operation. When asked if he knew if the FAA was there specifically to evaluate the FlyNYON operation and the tether system, he said that was what he heard, yes, but he was not there. He thought they were brought out specifically to inspect the operation and how the tethering system was set up. From what he understood, the FAA walked away happy, or did not have any other input. When asked who told him that, he said it was probably Christi, or he may have heard it through the grapevine.

When told that the FlyNYON website had said “Using our proprietary 8-Point Safety Harness System (SHS), we go beyond industry safety standards for each person on each and every flight,” and asked what was “proprietary” about this 8-point system, he said he did not know, and did not where that came from or where the wording came from. When asked what industry safety standards the phrase was referring to, he said he was not sure, and he was not part of web

development or marketing. As far as he knew, there was nothing proprietary about the system, and he did not know if a patent was ever sought for the system.

When asked if a hazard assessment performed for tethered passengers and doors off operations, he said no, not that he knew of. He said he was not sure he understood what a hazard assessment was. When asked if there was an official approved third-party assessment of the system similar to an engineering hazard assessment, he said no, not that he knew of. When asked why not, he said probably because the system was relatively efficient to do what it was designed to do. When asked if anybody discussed doing a hazard assessment or risk analysis, he said not that he was aware of, and no one brought it up to him.

When asked if he had seen the passenger briefing video used by FlyNYON for use of the harness system, he said yes. When asked if, based on his experience with supplemental restraints in his SAG and professional photography flying, if he felt the 3-minute video was adequate to prepare passengers in the event of an emergency, he said he thought it was adequate. When asked why, he said the video was adequate and there was also a hands-on approach to reiterating what was on the video; how it worked, how to get out of it, where the knife is, and also every pilot in their briefing would go over it again. It was a very hands-on type of approach. The video was only one component of it.

When asked about NYONAir's relationship with Liberty Helicopters during his employment at NYONAir, he said what he knew was that he was not a part of dealing with them, but he understood there was an agreement made that they would provide supplemental flights for FlyNYON operations. He did not know the content of the agreement, but it was primarily for FlyNYON flights from what he understood. These were the shoe-selfie flights.

When asked why did FlyNYON approach Liberty to conduct these flights, he said it was probably because Liberty sightseeing flights around New York was being cut in half for political reasons and they were looking for more work, and FlyNYON was looking for more favorable rates on aircraft and pilots, and Liberty provided that to FlyNYON. He said it was probably a more economical decision. When asked if he was familiar with the Liberty operation, he said NYONAir shared hangar space with Liberty, knew mechanics, knew a couple of their pilots, and were on the ramp together, but as far as their operation specifications and other specifics, he was not familiar with Liberty operations. He was familiar with the company and the people, and said it was comfortable working with Liberty.

When asked from a business and COO perspective, how he managed the growth of the FlyNYON side of the NYONAir business, he said Pat Day could better answer because he was driving it in that direction. From the time FlyNYON was really growing, he was not involved in the day to day operations. He knew what was going on, and that it was growing fast and really exciting, but as far as how they were growing it, it was not his area. When asked from a business standpoint if he had any concerns about the FlyNYON "brand" with Liberty operating its flights, he said no. He thought if the two companies were talking about doing this together, NYONAir would help Liberty understand what they were trying to do and at the same time what they needed to do it, the brand, and what their customers liked and how to interact with them. That would have been probably the scope of the relationship, but operationally Liberty did their own

thing. When asked how that relationship changed over time from the beginning of the relationship with Liberty to 2018, he said he did not know, and from his perspective it seemed like it was working.

When asked if he was aware of the pilot safety meetings, he said he knew of the meetings and was invited to join the meetings and listened in on a couple phone calls, but realized there was really no reason for him to be there since it was a lot of chitchat about stuff he was not involved in. He did review the minutes of the pilot meetings, and he was aware of the concerns voiced by the Liberty pilots in the winter of 2017 and 2018 from those minutes. When asked if he discussed those concerns with NYONAir management, he said no because management was already addressing it. He said he was so far removed from being an operational guy there that his being there he thought it was not necessary, and a lot of people were already involved, and he thought it was well in hand. When asked if none of that really concerned him and he thought it was being handled, he said sure, and there were a lot of smart people involved.

When asked if he was aware of the interaction between some of the Liberty pilots and NYON's CEO, he said no, not until after the accident. He heard that Pat Day and Scott Fabia had some offline comments to each other, and it was something he did not know the context of, but it was "strained." He was not specifically aware of any other Liberty pilot communications with the NYONAir CEO, and no Liberty or NYONAir pilot contacted him with any concerns.

When asked about concerns with the potential for conflict between passenger tethers and flight controls, he said he did not have barely any time in that airframe, but knew the controls were on the floor so he would hate to say, but assumed the pilots that flew that aircraft were very aware of what was going on down there and would be diligent about anything getting into their controls, whether flying a NYON flight or any type of flight for that matter. He said he did not have any concerns. The helicopters he flew only had the collective on the floor, and a pilot's hand was on that, and the rest of the controls were on the ceiling. He said, "as a pilot you have to be diligent on the cockpit and make sure nobody's interfering with anything, especially in a doors-off type of environment."

When asked if he was aware of any concerns about the ability for passengers to evacuate a FlyNYON flight on the ground in an emergency situation, he said not that he was aware of. When asked if he had any personal concerns about the ability for passengers evacuate a FlyNYON flight on the ground, he said no because as a captain, he would feel confident he would be able to instruct his passengers on how to egress the aircraft properly. Every pilot and aircraft was different, so he could not comment on anyone else's method, but as a captain and pilot, he felt he would be able to instruct and insist with any kind of evacuation.

When asked to describe the safety culture at NYONAir, he said he thought it was very good. They were constantly improving and trying to find better ways to secure passengers into the aircraft with their gear. The safety video was being redeveloped, and new harnesses were coming on line. He said safety was definitely their number one priority. When asked about his perceptions of the safety culture at Liberty Helicopters, he said he could not comment on their safety culture since he was not a part of their company. He said there were no negative perceptions about Liberty, and they were probably just as good as anyone else as far as how they

approached safety in and around the helicopter. There was a standard set, and they were right around up there with it.

He left NYONAir as COO around April of 2018. He was still on the NYONAir board. He left the COO position because it was something he and Pat Day had been talking about for quite some time. After the accident, he felt like he did not need to be in that role. The accident was a tough experience for him. People had died, their passengers, and it hit him hard and made him really rethink what his priorities were as far as his role with the company. He was not doing anything anyway, and it was maybe just a formality, but he wanted to get his leaving finalized.

When asked to explain his earlier comment about looking at Search and Rescue operations when developing the harness and tether system, he said he thought at the end of the day they figured that what Search and Rescue was using was mainly for being outside the aircraft; hanging in a sling, hoisting and all that. Those systems were very expensive, and they could not find anything made for inside the helicopter and wanted something to keep people inside. The more realistic thing that could possibly happen was somebody falling out if not secured properly if there was an evasive maneuver or something of that nature. From what he understood from Rob and his research, he felt they should stick with something that was more apt to keep you secure and safe as opposed to too cumbersome and big to hang on. That was where they were at on the subject. They developed what they had, and as the business grew and more and more people got their fingers in on this, they felt what they had was quite good. There was a lot of other people with more knowledge than him being able to assess what they were doing, and they provided insight or made little changes to what they had developed.

When asked, based on his past experience as an owner of a Part 135 certificate, if he knew what a risk assessment was, he said yes. When asked if there was any risk assessment conducted at any point on the use of the FlyNYON supplemental restraint system, he said no, not any kind of official risk evaluation. When asked if they were flying passengers around with the original harness system as the company was growing, he said yes.

He clarified that his earlier comment about the Liberty pilot and the NYON CEO was “strained.”

When asked why NYONAir got a Part 135 certificate, he said it was to do basic charter flights, not just photo flights. When asked about the growth plans for NYONAir, he said as a business they wanted to try to do this in any city that it would serve well in. It was visually impactful to see a city from the air, and they were not just limiting themselves to Las Vegas, Los Angeles and San Francisco. They had global aspirations, but they were realistic in trying to grow the business appropriately.

He said he stepped away from day to day involvement with NYONAir in late 2016, but he was still a part of it as the COO. He had stopped doing FlyNYON flights and focused on doing more production work and spending time with my family.

He concluded by saying the safety culture at NYONAir was of utmost importance. They had a lot of people with lot of experience had the same mindset, and not a “willy-nilly” thing going on. Safety was constantly at the forefront of their thinking. They had aviation professionals with

years and years of experience that were a part of the entire company, and also at Liberty for that matter. The safety aspect was front and foremost a huge component of what they were trying to do, and they wanted their passengers to feel safe. They really made sure they felt safe, included that to their briefings, and how they were being secured. Other than that, he was good with the questions in the interview.

When asked if he had anything further to offer for the investigation, he said no.

Interview concluded at 1440.

27.0 Interviewee: Drew Schaefer, Former Liberty Chief Executive Officer (CEO)

Representative: Paul Lange, Law Offices of Paul Lange

Date / Time: June 19, 2018 / 1300 EDT

Location: Via telephone

Present: Van McKenny, David Lawrence, Bill Bramble– NTSB

During the interview, Mr. Schaefer stated the following:

His name was Drew Schaefer, and he was 57 years old. He did not hold a current position at Liberty. He currently was just doing his own management consulting. His position with Liberty at the time of the accident was the CEO and Chairman of the Board. He held that position originally from the founding of the company in about 1989 or 1991, and then stepped away for a number of years, returning around 2007 or 2008. He more recently stepped away as CEO within the last 30 days, about May 18, 2018. He originally stepped away between about 1991 to 2007 and was not the CEO or Chairman during that time, and he was not employed by Liberty in any capacity during those years. He stepped back in as CEO around 2003 or 2004.

He was not a pilot, and he did not have any flight experience. His background included finance, private equity, mergers, and strategic management consulting. He held no other positions at Liberty.

As CEO, he reported to the Board. He was the Board's Chairman, and Alvin Trenk (a former CEO), Pam Schaefer (his ex-wife from 25 years ago), and Craig Sulaitis were board members. Chris Vellios at Liberty reported to him directly.

His responsibilities and activities as CEO included strategic guidance for the company and financial oversight of the CFO, who also reported to him. Chris Vellios was the CFO and the COO and held responsibilities for day to day operations. When asked if there was any guidance for fulfilling the responsibilities of CEO, he said no. It included general corporate responsibilities, and he could not recall anything written.

When asked if he had an office at the Liberty Kearny headquarters, he said no, he did not. His office was located in New York city. He did not have an office in Kearny since there was no need, and corporate (non-operational corporate) for Liberty was based out of New York.

When asked how often he interacted with operational Liberty staff, he said he attended staff meetings, met with Chris fairly regularly, and met with other staff infrequently because of the chain in command. His meetings with Chris depended on the necessities and reports and was as needed. He said it would be hard to guess how frequently he met with other staff since that was under Chris's domain, and he did not want the staff to get confused.

When asked if he held similar management positions at any other companies, he said yes, Unimeg as Chairman and CEO, and at CHR as a partner, and that would be it. When asked how he divided his time to accomplish his duties at multiple organizations, he said he probably worked 18 hours a day, and would get phone calls daily or weekly from both of those companies and served the same role. When asked if any one particular organization required more of his time, he said no, they were balanced out, and it was hard to guess.

When asked what high-level manager or executive was principally responsible for managing safety at Liberty, he said it was a chain of command, with Chris as COO, Pat Day Sr. as DO, Paul Tramontana as chief pilot, and the numerous directors of safety they had over the years, the last one being Brent Duca. The COO reported to him, and the COO and the DO or chief pilot as a combination were responsible for safety, and it would flow up to him. He said they were pretty competent people. He did not get regular reports on safety, only if it would arise to him, like maintenance expenses and things like that. When asked if there were any safety issues that were reported to him, he said no.

When asked about the role of Patrick Michael Day at Liberty, he said Pat Day Sr. was the DO and co-founder of the company from the very beginning. When asked how often he interacted with Patrick Sr. and under what circumstances, he said it was relatively infrequent. They were together for 25 years, and he left it to Pat Day Sr.'s competent hands for all those years. Pat Day Sr. started as one of his pilots in about 1989 when they formed the company, and he was very experienced. When they did talk, it was mostly on a corporate basis. Pat Day Sr. would call him, but for day to day matters, Pat Day Sr. reported directly to Chris.

When asked about the role of Pat Day Jr. at Liberty, and how often they interacted, he said it was more frequently when Pat Day Jr. was at Liberty in marketing. There would be periods where they would talk sometimes daily, and sometimes not for a month; it depended. He might interact with him if he needed a flight or would find a charter customer for them.

When asked about the history of the shoe-selfie photo flights, he said he was familiar with the shoe-selfie flights, but he did not know the background of how they got involved. He said Pad Day Jr. developed the concept, and Liberty supplied aircraft to FlyNYON for their missions. They basically leased aircraft to FlyNYON on a per hour basis when they called for one.

When asked if, at the time of the accident, he had knowledge of any other helicopter operator offering similar doors-open aerial photography flights using supplemental passenger restraints systems similar to FlyNYON, he said he was told other operators were doing it but did not know who.

When asked if he was approached by NYON to set up this leasing arrangement, he said NYON was Patrick Day Jr., and he discussed it with him, along with Chris Vellios, who had the primary responsibility for dealing with it. Patrick Day Jr. did not approach him and Chris at the same time, but they both spoke to Patrick Day Jr. over time regarding the flights, and for sure they discussed it separately. When asked if they discussed the operation itself, along with the doors-off and supplemental restraint system, he said yes, they discussed it prior to Liberty leasing Pat Day Jr. aircraft and charging him by the hour for the aircraft. He did not recall a specific conversation about the harnesses.

When asked if he had concerns about the operation, he said no. He relied on all the senior officers that they were always flying in a safe mode, and his instruction to tell him if he needed to know something so he could do something about it.

When asked if he had knowledge of other operators using a tether system, he said he believed NYON, and thought he was told that other operators were doing it, but he could not remember who the operators were.

When asked how the tether and supplemental restraint system was developed, he said he had no knowledge. When asked if he had experience with harnesses and supplemental restraint systems, he said no.

When asked if he had taken a FlyNYON flight before, he said yes, he did, about the time when Liberty started doing the flights in late 2017, or sometime in the fall of 2017. When asked about his experience, he said he was given instructions by the pilot and staff that was there, who showed him how to put the harnesses on. They then walked to the helicopter, they were put in the helicopter, and then they flew. It was not his first time with a doors-off helicopter flight, so it was not a new experience for him. There was a safety briefing and instruction, and then he got onboard like a normal passenger. There were about 3 other passengers on the flight he took, and he did not remember if it was a Liberty on FlyNYON aircraft. When asked if he had any concerns about egressing the aircraft in an emergency, he said no.

When asked if there any industry standards with regards to supplemental restraint systems applied to the FlyNYON harness system when it was being developed, he said he would not know that answer.

When asked if there were any other industry experts consulted about the harness system, he said he would not know that answer, and that would go to Chris and Pat Day Sr.

When asked if the FAA was consulted about the use of the supplemental restraint system, he said he was told the FAA looked into it or inspected it, and said it was ok. When asked who told him that, he said it came from Pat Day Jr.

When asked if a hazard assessment was performed for tethered passengers and doors off operations, he said he could not say, and it would belong to Pat Day Sr. and his staff.

When asked if a full emergency egress test performed on a FlyNYON flight, he said he did not know.

When asked if he had seen the passenger briefing video used by FlyNYON for use of the harness system, he said yes. When asked if he felt the 3-minute video was adequate to prepare passengers in the event of an emergency, he said he did not remember what the video said, but at the time he watched it, he did not have any reaction that it was not adequate.

When asked about Liberty's relationship with NYON during his employment at Liberty, he said NYON would order the aircraft, Liberty would supply them, and the offer them an hourly or trip rate. He could not remember how Chris had it arranged but thought it may have been a charge per flight.

When asked if Liberty had any other business dealings with NYONAir, he said not to his knowledge, but perhaps they possibly flew some NYONAir charter customers, that may have been possible. They may have had a charter relationship with NYONAir. When asked why FlyNYON approached Liberty to conduct its flights, he said it was an economic decision, and FlyNYON needed more aircraft than what they had themselves.

When asked, from a business standpoint, how did he managed the growth of the FlyNYON side of the Liberty business, he did not think they did, and it was NYON that managed the growth. Liberty provided the aircraft.

When asked if he was he aware of the pilot safety meetings, he said no, he was not aware of them. He never sat in on any of the meetings, and he never got notes or minutes from the meetings.

When asked if he was aware of the interaction between some of the Liberty pilots and NYON's CEO, he said he knew they dealt with him since they were flying for him. When asked if he was aware of the NYONAir CEO communicating directly with the Liberty pilots, he said no, not directly, but he would assume so through the DO or chief pilot through the other Liberty staff members. He could not say if Pat Day Jr. was interacting through the normal chain of command or was speaking directly to the Liberty pilots; it could have been both. When asked if Pat Day Jr. communicated directly with Liberty pilots outside the chain of command, he said he could not speak to that.

When asked if Pat Day Jr.'s communications directly with Liberty pilots would be of concern to him, he said no, not if he spoke to them, since Pat Day Jr. certainly knew all the Liberty pilots. When asked if he had any concern regarding any influence by the NYONAir CEO, trying to influence Liberty pilots to take flights, he said he was not aware, and would be concern if he was told that, but it was never directed to him.

When asked if he was aware of any incidents involving potential for conflict between passenger tethers and flight controls, he said no, only what he read in the papers post-accident. He read what he read in the paper, and Pat Day Sr. and Jr. reported to him similar facts. When asked to

clarify that both reported to him about tethers interfering with the controls post-accident, he said yes, they reported that to him and Chris

When asked to describe the safety culture at Liberty, he said it was always one of compliance, and address anything that would be mechanical in nature of could affect safety any way possible. He said that was always his mantra and was how they were instructed to run it.

When asked about the safety culture at NYONAir, he said he could not speak to it at all.

When asked to clarify the date he left Liberty, he said May of this year, and he was not currently involved in Liberty. He stepped down when Alvin Trenk bought out the shareholders and took 100% of control of the company.

When asked about New York's reduction of tour flights by 50% out of the heliport in lower Manhattan, and how that influenced Liberty's financial position, he said it definitely affected it, and lowered their volume on sightseeing flights. They also increased their volume on charter flights. There was definitely a decline in revenue, but that was a 2 or 3-year sunset period when it was instituted.

When asked if Liberty had to let people go at because of that, he said yes, they trimmed down staff because of the lower volume to continue profitability. He was not sure how many staff were let go, but it could have been 1/3 of the work force. This was phased in by Chris.

When asked how much Liberty revenue came from FlyNYON flights, he said it was a small portion. When asked if he expected that would be the case for 2018 before the accident occurred, he said yes, he would expect that, it was all unknown, and it was anticipated to be a small portion that they would continue to grow.

When asked what his involvement was to begin operating FlyNYON flights at Liberty, he said it was more of a joint decision, and everyone in the company was aware of it. When asked if there were any objections from Liberty staff with doing the FlyNYON flights, he said no, not any objections made to him, but that did not mean no one objected. NYONAir was a competitor.

When asked if he was involved in the decision to have Liberty leave the TOPS program, he said no. When asked if that was more of Chris's area of responsibility, he said correct.

When asked about Chris's on-line resume that said the "led the charge to create a culture of safety" at Liberty, and what his responsibility and what he had done, he said the DO and others at the staff reported directly to Chris so that all the day-to-day decision making was funneled to Chris for his approval. Mr. Schaefer got recommendations from DO, DOM, and chief pilot, and he would then interact directly with them.

When told Mr. Vellios was asked whether he was aware of the director of training communicating concerns about the harness, equipment, or training and he said that he could not recall, and asked whether he was copied on a response Pat Day Jr. sent to Brent Duca where Pat Day Jr. mentioned he was insulted by Brent Duca questioning the FlyNYON staff and Pat Day

Jr. further threatened to take his business elsewhere, and Mr. Vellios said he discussed it with the Liberty CEO and believed the Liberty CEO had a conversation with the NYONAir CEO, Mr. Schaefer said he recalled that event. He said he remembered seeing that email and saying to Pat Day Jr. something like “isn’t that a little brash, a lot of lecturing” and that was not something Pat Day Jr. should not be doing to promote camaraderie and motivate people. When asked about Pat Day Jr.’s response, he said Pat Day Jr. told him “that was pretty much how I see it.” Mr. Schaefer said he would describe it as “bravado.”

When asked if that was the end of the discussion, he said no, it was so long ago, but that was the general discussion. It was a brash way to speak to people, a lot of bravado, and everybody was working hard. Mr. Schaefer said if Pat Day Jr. wanted to take his business elsewhere, go ahead. It was not the culture of Liberty management to tolerate that.

When informed about Pat Day Jr.’s texts to Brent Duca regarding a decision in early January to not launch a flight because it was too cold, and Pat Day Jr. told Mr Duca that Saker (the company that operates the heliport) had given Liberty a 30-day notice with only \$500,000 in the bank Liberty would need money to fight, and if they did not have enough money they would not need any Directors of Training. Mr Schaefer was asked if he knew what Pat Day Jr. was talking about, Mr. Schaefer said he did not recall seeing that text, and was not sure how he (Pat Day Jr) would know that about Liberty’s financial situation. Saker had given Liberty a 30-day notice to pay their receivables on the heliport downtown or face eviction Mr. Schaefer was not sure how Pat Day Jr would know anything more about Liberty financials, and would have such knowledge to make those statements and it was hearsay and gossip, with partial truth.

When asked why Saker was giving Liberty notice, he said he could not answer that question other than they gave notice and accelerated the normal payment cycle multiple times, and all operators were paying them late, and Liberty would have to accelerate their payments. It was normal to have 30, 60 or 90-day payment cycles, and that had been normal business practice for years. Saker accelerated the payment process, and Liberty had to manage cash flow on such a short demand, and he told them so. It was resolved in liberty’s favor.

When asked if he would characterize Liberty as struggling financially at the time of the accident, he said no, it was Saker accelerating their billing practice which put Liberty under financial pressure. Every year from November to April was a struggle since business volume dropped and receivables would extend. Chris would manage those payment cycles. Last year was a little more difficult, with more weather days, maintenance expenses, fewer passengers and reduced volume.

When asked if that put Liberty at a dis-advantage with NYONair and their influence over Liberty, he said no, Liberty was doing business with NYONair like any other customer.

When asked if he would consider his position as CEO a corporate position, he said yes.

When asked if Liberty had a safety manual, he said he believed they did. When asked if he had seen it, he said he could not remember the last time he did, and that would go to Chris and Pat Day Sr.

When told about safety manual's list of responsibilities for corporate officers, which included the responsibility to "prevent and correct all unsafe or potentially unsafe acts or conditions before a mishap occurs," and asked how he would do that, Mr. Schaefer said if brought to his attention by people overseeing those areas, he would immediately call them to act or interact. He said that was their instruction, and the way at Liberty for more than 20 years. That was how it always operated; up through the chain of command through the people with those specific areas of responsibility. If anything was brought out as an issue, it would be reported to him and he would make sure they took corrective action.

When asked if he relied on Chris to report safety issues to him, he said yes, or anyone else that would want to come to him. They had an open-door policy. It included Pat Day Sr., Chris, and the natural chain of command, but he relied on Chris to report safety issues to him.

When asked if anyone, including Pat Day Sr., Chris Vellios, Brent Duca or Paul Tramontana, ever brought to him safety concerns voiced by the Liberty pilots regarding the supplemental restraint system and harnesses used on FlyNYON flights, he said no, not to his knowledge, and Chris would have jumped all over that. He said Chris and Pat Day Sr. were conservative. When asked if anyone should have come to him regarding concerns the Liberty pilots had with the supplemental restraint system and harnesses on FlyNYON flights, he said if they had been told about it, then yes.

When asked if he had anything further to add to the investigation, he said no.

Mr. Schaefer was asked whether the billing dispute with Saker was resolved through a court decision and he said no. Saker decided to extend the payment schedule. It was a mutually agreed upon resolution.

Interview concluded at 1423.